Rear-view Camera Installation Instruction

Rev 1.5



BEFORE YOU START

Installation of Rear-view Camera Retrofit should be performed by an installer with appropriate knowledge and experience. We strongly recommend using services of professional installers, experienced with BMWs, for this installation.

Battery should be disconnected prior to the installation for safety reasons. Reconnection of the battery should be done only after all electrical connections are in place.

For self-coding feature to work, your vehicle's software must be recent (or at least from 2012).

For normal operation of PDC (if available), vehicle's software must be recent (or at least from 2012).

READ THE COMPLETE INSTRUCTION BEFORE BEGINNING THE INSTALLATION PROCEDURE.

This manual covers installation of the Rear View cameras of two types: Rear View Camera with Static Guidelines and Rear View Camera with Dynamic Guidelines. Both camera types requires very similar installation technic with just a minor differences.

Rear View camera with Static guidelines has control module attached to the PNP wiring





<u>Rear View camera with dynamic guidelines has separate control module which connects via 12 pin</u> <u>connector with the main PNP wiring harness</u>



STEP 1

Remove CIC/NBT head unit ('head unit') from its position (but do not disconnect any of the wiring just yet). This will require you to remove some plastic trim on your dashboard and unscrew appropriate screws.

Depending on the model of your BMW, you may need to switch transmission to 'Drive" position, before removing the head unit (to give more space to maneuver).

We also recommend that you place some protective blanket on the center console trim, to avoid possible scratches and dents.



- 1. Please locate the main power connector harness at the back of the head unit, as shown on the picture on the left.
 - Note that the colors of the wires connected to the harness may vary from one vehicle to another.



 Disconnect the quad lock connector from head unit and take a quick look at it.

> You will need a flat screwdriver in order to remove the optical connector from the main power connector harness and re-plug it into the connector on the Camera Module.

Please look at the picture on the left.

WARNING ! It is important to reconnect this OPTICAL cable in order to avoid loss of sound and other multimedia features.

If your vehicle does not have this optical connector (vehicle with no MOST and with no top HiFi Logic 7 or other high end amplifiers) then you do not need to reconnect this cable.



1. Gently pull the plastic lock on the connector using a screwdriver and pull up the two optical cables as shown on the pictures below.



		
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STEP 5



 Now re-plug this optical connector into the same position on the Camera Module's connector as shown on the picture on the left.



2. Now connect the Main power connector harness into the opposite end of the Camera Module's connector as shown on the picture on the left.

STEP 6

Connect the Camera Module between the head unit and vehicle's quadlock connector.

For Rear View camera with dynamic guidelines also connect 12pin connector from main PNP wiring harness to the camera control module.

Secure control module behind the dash with use of tie-ups or other type of mounting. Ensure that control module is secured and wiring attached to it is not blocking head unit path in the dash board.







- 1. Connect Micro USB cable to the Camera Module (only for Beta test or if you prefer to have easy ability to update internal module's firmware in the future).
- 2. Another end of the USB cable should be passed under the dashboard and left floating outside for future use with laptop for firmware updates.
 - Refer to STEP 12, item 3 for more information on connecting USB cable to the Camera Module.

STEP 8 (RE-INSTALLING THE HEAD UNIT)

Re-install your head unit inside the dash board.

Usually at the back of the head unit tunnel in the dash board on the right or left side, there will be some sort of opening. You may use that opening to install the Camera Module. This will let you install head unit until completely, to the end of the tunnel.



IMPORTANT INFORMATION BEFORE YOU PROCEED TO THE NEXT STEP TEST OF CAMERA BEFORE INSTALLATION

It is not mandatory but HIGHLY RECOMMENDED to test your camera and make sure that it works in prior to passing all wiring in to the back and installing camera in its original place. Assume that at this point you have your Camera PNP module installed and connected to the head unit. Camera wire from PNP module is not yet passed across the vehicle in to the back. Now it is a good moment to make a camera test.

1. Connect your camera to PNP adapter camera cable and place it somewhere near you. **IMPORTANT:** Make sure that the camera plug is inserted into the connector on the cable until the end.

It may be a little bit hard to push it until the end but the plug of the camera should be fully inserted, otherwise camera will not work. It is strongly suggested to isolate each connector of the camera (power connector, video connector, handle connector) for better effect.

- 2. Temporary skip next steps and go directly to STEP11. Connect back battery terminal temporary for testing of the camera.
- 3. Proceed with camera settings via iClick technology and head unit self-coding via camera adapter. This step is only required if your camera is in Manual mode of operation.
- 4. Turn ignition ON-OFF-ON at least 2-3 times to allow camera module to detect your vehicle.
- 5. Start engine (or turn ignition on) and after switching to reverse make sure that you have actual picture from the camera on the display of the head unit. If all looks okay means you have properly connected camera PNP adapter to your head unit.
- 6. Disconnect battery terminal again and continue with the next steps of camera installation.

This checkup above is not mandatory but HIGHLY RECOMMENDED. The idea of this checkup is to ensure that the video feed from the camera is okay.



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1. Remove the rear door (trunk) opener handle and install the camera instead.

Camera assembly has its own handle for the door (trunk). Reconnect the wire from vehicle which initially was connected to your original handle sensor to the camera handle sensor.

STEP 10 (PASSING THE WIRES FROM HEAD UNIT TO THE TRUNK HANDLE)



There is no right or wrong way to pass the wiring it depends on your personal preference and experience. Here is a brief description of how one of our technicians prefers to do the installation. It is not the only way to do the installation.

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 Pass the cable from the back of the head unit (from the Camera Module) to the rear door (trunk cover) and connect camera to the other end of the cable.

> Our technicians prefer the left rocker panel (i.e. on the driver's side), because passing the cable along the left rocker panel, requires one to remove the glove box compartment, and they find that takes a little longer to do. However, if you prefer passing the cable along the right rocker panel, that is also a possibility.

Please see pictures on the left for some insight.



- 2. After you pass the cable all the way to the back seat, you need to fold down the back seats and to remove the corner pillow.
- Then pass the cable to the opposite side of the vehicle, along the back seat.

Once you get the opposite side, you need to pass wiring through the rubber tunnel.



- Remove top lining of the trunk in order to pass wiring in an inconspicuous way all the way to the trunk handle.
- Once you get the trunk handle, just connect the cable to the connector on the camera, built into the trunk handle.

IMPORTANT: Make sure that the camera plug is inserted into the connector on the cable until the end.

It may be a little bit hard to push it until the end but the plug of the camera should be fully inserted, otherwise camera will not work. It is strongly suggested to isolate each connector of the camera (power connector, video connector, handle connector) for better effect.

IMPORTANT: HEAD UNIT MAY REQUIRE ADDITIONAL CODING FOR THE REAR-VIEW CAMERA TO WORK (SEE STEP 13 OF THIS INSTRUCTION MANUAL)

STEP 11

IF YOU PURCHASED REAR-VIEW CAMERA TOGETHER OUR CIC/NBT RETROFIT and IF YOUR VEHICLE IS EQUIPPED WITH DVD CHANGER and/or TV MODULE

If your camera is purchased together with the CIC/NBT kit from us, and your vehicle is equipped with the DVD changer or TV module, you may need to re-pin some connectors in order to retain other functionality, such as DVD changer or TV. Additional instructions will be provided with the CIC/NBT kit for this case.

In case if camera is purchased separately (without CIC/NBT kit) there is no need to perform any additional re-pinning of the connectors.

STEP 12 (CONNECTING MICRO USB CABLE FOR FUTURE FIRMWARE UPDATES OF CAMERA MODULE)

If this is a beta test install or if you want to simplify any future firmware updates for the Camera Module, we strongly suggest to connect USB cable to the Camera Module and pass the other end to the outside of the dashboard for further firmware update needs. This step will ensure that you will not need to disassemble dashboard every time that new firmware update is released.

When installing Camera Module (with USB cable connected) at the back of the head unit, please be careful as you may accidentally break USB connector inside of the Camera Module. Make sure that the USB cable is angled at 90° to the Camera Module and/or that no obstacles are pushing on the USB connector, which may cause USB plug to break inside of the Camera Module. Simply use common sense when installing Camera Module under the dash.

STEP 13 IS CODING REQUIRED IN YOUR CASE?

If your camera is purchased together with the CIC/NBT kit, its functionality should already be coded by BIMMER RETROFIT into the CIC/NBT. There is no need for additional camera coding, unless otherwise is stated by seller.

In case if your camera is purchased separately, additional coding is required in order to activate rear-view camera.

Your rear-view camera is self-coding. This means the camera module has a built-in coding feature, and the camera can code itself.

See next sections for instructions on how to use the self-coding feature.



PNP CAMERA MODULE CONFIGURATION MODES SELECTION

- 1. Your Camera Module has a built-in logic which allows you to perform configuration using the iDrive controller of your vehicle. Clock in the head unit is used for results output and for interaction. This configuration mode is called iClick Mode.
- 2. In order to switch your Camera Module to the configuration mode, you have to make sure that your head unit is turned on and you can see Main Menu on the display.
- 3. There are two methods of configuring your camera control module via iClick technology or via separate free PC utility by connecting your PC via USB cable to camera module. Below we provide instructions for camera configuring via iClick technology. Description of camera configuring via PC utility described at the end of this manual.
- 4. Configuration can be performed using iDrive controller rotation clicks. To select any desired function, you need to enter the 3 digit code value, associated with the desired function. A list of available functions and associated 3 digit codes are provided in the next section.

Below it is explained how you can enter this 3 digit value using the iDrive controller:

- a. For example we need to select option called: Video in Motion (VIM) activation or deactivation. Code 3-1-2 is assigned to this function.
- b. Press 'Menu' button and hold it for approximately 7 seconds. While holding the button down keep an eye on the clock in the head unit. As soon as you see time 0:00, that means you have entered the configuration mode.
- c. Now rotate your iDrive controller clockwise (to the right) very slowly one click by one and watch your clock on head unit display. You will see that as you turn the iDrive controller to the right, hours increase from 0 to 5 with each click (0:00 → 1:00 → → 5:00). You need to make the 'hour' value equal to 3 (since our VIM option code is 3-1-2 and first number is 3). The clock on the display should display 3:00.
- d. Now rotate your iDrive controller counter-clockwise (to the left) very slowly just for 1 click. You will see that the second value on the clock (minutes) will become 1 (3:00 → 3:10) Now you have selected second number from VIM option code which is 3-1-2.
- e. Now rotate your iDrive controller clockwise (to the right) very slowly one click by one and watch your clock on head unit display. Once you turned the iDrive controller to the right for 2 clicks, you will see that you the third value on the clock (minutes) will increase from 0 value to 2 (3:10→3:11→3:12). Once you see that the value on the clock of head unit matches the VIM option code 3-1-2 (on display it should be 3:12) you are done with selection.
- f. Now you have to push the iDrive controller know down and hold it for a little bit more than a second, until you see the value **11:00** or **11:01** or **--:--**

- g. These values may show up only for a second or two and disappear after. Value 11:00 means that the option which you just choose is Deactivated (00 in minutes value means Turned OFF). Value 11:01 means that the option which you just selected is Activated (01 in minutes value means Turned ON). This is true when you select the options which can be left ON or OFF for long period of time. Video In Motion option can be kept ON or OFF for any amount of time. However if the option which you choose is a service option (for example Firmware Update) you may see the message like: --:-- instead of 11:00 or 11:01
- h. In case if during selection of the option code, you jumped over the desired value you may easily reset to **0:00**. Simply rotate iDrive controller to the left until you see **0:00** in clock of the NBT display.
- i. In order to return back to the normal mode without selecting any option, push down iDrive knob while selecting code **0:00** which means: No option selected.

EXAMPLE: DESIRED OPTION CODE IS 4-3-4 (DEMO PURPOSE ONLY)

- 1. Push and hold 'Menu' button for aprox. 7 seconds
- 2. Once you see 0:00 time in head unit you entered configuration mode.



Rotate click by click iDrive controller to the right (clockwise) until you see the time as:
 4:00





4. Now rotate iDrive controller to the left (counter clockwise) until you see the time as: **4:30**



At last rotate iDrive controller to the right again (clockwise) until you see the time as:
 4:34

运 Ha	uptmenü 4:34	
	Multimedia	
	Radio	
	Telefon	
	Navigation	
	Office	
\checkmark	ConnectedDrive	
	Fahrzeuginfo	

6. Now push and hold iDrive controller knob down for approximately 1-2 seconds until you see --:-- appeared instead of time.



7. Your option has been selected. Normal time information will be available on the display within 1 minute.

If you selected some option which can be either Disabled or Enabled you may also see the confirmation message as: 11:00 (Disabled) or 11:01 (Enabled).



Available configuration option codes for the PNP Camera Mode (this list is constantly updated with new features)

Service modes:

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- 4-3-3 Firmware Update Mode
- 5-5-4 PNP Module Reboot
- 5-5-3 Coding of the OSD mode (only for Dynamic Lines adapters)
- 5-5-1 Camera Self Coding Mode
- 5-5-5 Camera operation mode (Automatic/Manual)
- 4-3-4 Factory Default Settings
- 4-3-5 Send current settings to USB VCOM

Operation modes:

- 5-1-1 Nav and Voice Activation
- 5-1-2 Video in Motion activation
- 5-1-3 Manual camera controls via iDrive controller
- 5-1-4 Block CAN ID:3AF from PDC to CIC

<u>Vehicle specific modes:</u> (Only one vehicle specific mode can be selected per time) Vehicle specific modes are used ONLY in Manual mode of camera operation

5-2-1 PDC Conversion for E7x series (pre-LCI only)

5-2-2 PDC and RFK for E7x series (pre-LCI with factory RFK camera only)

- 5-2-3 E7x/E8x/E9x Rear View Camera for Automatic Transmission with PDC option
- 5-2-4 E7x/E8x/E9x Rear View Camera for Automatic Transmission with no-PDC option
- 5-2-5 E7x pre_LCI Rear View Camera for Automatic Transmission with no-PDC option
- 5-3-1 E7x LCI Rear View Camera based on Reverse Light
- 5-3-2 E7x LCI Rear View Camera based on Shifter position
- 5-3-3 E7x/E8x/E9x Rear View Camera for Manual Transmission with no-PDC option
- 5-3-4 E6x Rear View Camera for Automatic Transmission
- 5-3-5 E6x Rear View Camera for Automatic Transmission based on Reverse Light
- 5-4-1 E6x Rear View Camera for Manual Transmission

Firmware Update Mode – used to update firmware in the Camera Module. Detailed description of the update process is provided at the end of this document.

Factory Default Settings – set all settings to factory defaults.

PNP Module Reboot – reboots internal processor of the PNP module

Send current settings to USB VCOM – sends current settings in to VCOM USB port. Please note that you should have USB cable connected to your computer and some terminal emulation software running. Port settings: 115200 8N1

Nav and Voice Activation – activates or deactivates Navigation and Voice activation in PNP module Video in Motion activation – turn ON or OFF video in motion speed signal filter in the PNP module Manual camera controls via iDrive controller – Allows camera to be turned on or off by iDrive controller. This option is always ON by default.

Block CAN ID:3AF from PDC to CIC – required only for new models of vehicles.

Camera Self coding mode – Codes HU to let camera to be used

Camera Operation mode - Switch camera operation modes (described below)

Vehicle specific modes refer to the model of the vehicle where camera is installed. Mode should be selected after camera is installed. After vehicle mode is selected you can perform camera coding to the headunit.

Simply choose the mode which is more suitable for your vehicle and its model. Camera may function correctly in more than one mode, this is normal.

REAR VIEW CAMERA SELF CODING MODE

It is important to make sure that your headunit software is recent or at least 2011 or newer. In case if you are unsure it is better to visit your local dealer or another authorized shop for the software version check and update procedure if required.

You must select Vehicle Specific Mode before proceeding to the next step!

You must select your specific vehicle mode for camera and only after that begin the self coding feature. This will ensure that your headunit will be correctly coded for your vehicle.

- 1. Following the instructions above select **Camera Self Coding Mode (5-5-1)** from the available options.
- 2. As soon as coding started you will notice that the Telephone menu on the CIC becomes grey for half second and after that iDrive controller become unresponsive for the entire duration of the coding. Also some warning messages may show up on the display depending on the vehicle's configuration. This is normal behavior during the coding process. Do not interrupt or switch off the headunit.
- 3. After approximatelly 10-15 seconds, your headunit will reboot. Once you see that display reboots, this means that the coding is completed. You may now test your camera or continue installation if not yet finished with the the installation of the hardware.

There is no need to repeat coding again, unless the head unit has been recoded or reprogrammed for any reason.

It is important to keep ignition on and to not disconnect head unit or Camera Module during coding procedure.

Reboot of the head unit is a confirmation of a successful coding. If the head unit does not reboot, it means that the coding has not finished successfully for some reason.

In that case you will need remote coding to be done by one of our specialists. For that you will need to have a USB K+DCAN cable.



REAR VIEW CAMERA OPERATION MODES

- 1. Rear View camera has two operation modes: Manual and Automatic.
- 2. During installation of the camera in **Manual mode** installer will have to manually choose the type of the vehicle camera installed to via either iClick or external PC utility. For example if camera is installed to the vehicle E70 2012 with no-PDC installer will need to select via iClick mode:

5-3-2 E7x LCI Rear View Camera based on Shifter position

This will set the camera module for proper operation with in vehicle's environment.

- 3. Step (2) still requires to be accomplished by proceeding with **Camera Self Coding mode** selection to ensure that head unit is coded for camera operation properly.
- 4. During installation of the camera in **Automatic mode** camera module will automatically determine vehicle model and required configuration. However installer still requires to proceed with Camera Self Coding mode to ensure that head unit is coded properly.
- 5. It is always possible to verify the current operation mode of your camera module by using Camera PC utility or by switching modes via iClick (**5-5-5 Camera operation mode**)
- 6. To check camera mode via iClick simply enter 5-5-5 via iClick and see the time response on head unit display. If time is shown as 11:01 means Automatic mode was just turned ON, if time is shown as 11:00 means Manual mode was just turned ON.
- 7. To check camera mode via PC utility connect utility as per instructions provided at the end of this manual and hit Read Settings button. Check information shown in utility to determine the mode of camera operation.

By default all Dynamic lines modules are delivered in <u>Automatic mode</u>. Manual mode will become obsolete and will be removed in 2016.

PNP Module Utility installation and use

- 1. PC utility and driver can be used with Windows7, Windows8 or Windows10.
- 2. Installation of .NET Framework 4.5 is required for proper operation of the utility.
- 3. Connect USB cable from PNP module to PC. As soon as your Windows
- 4. Install attached with the pack driver for the newly apeard USB device. For Windows 10 driver installation is not required as the driver will be installed automatically.
- 5. In your PC new Serial Port device under Ports will apear. Write down number of the COM port device which apeared in your system
- 6. Start utility program included in the pack.

	PNP Module Config Utility ver. 1.15319.38	
COM Port	Available Serial Ports	
16 v	USB Serial Device (COM5) Communications Port (COM1) USB Serial Device (COM6) USB Serial Port (COM3)	
Read Settings		
Factory Defaults		
FDL Defaults		
Options :	selection	
	V Run Task Clear Evit	

- 7. Select COM port of PNP adapter which apeared in your system and click **Connect** button.
- 8. Utility should report about sucesfull connection and **Connect** button should become green.
- 9. Click Read Settngs button to see current adapter settings.

	PNP Module Config Utilit ver. 1.15319.38	У		
COM Port	CONNECTED OKAY			^
сом6 ~	ОКАҮ			
Online	Dynamic Lines camera module by Bimmer Retrofit Inc Current Firmware Version: 15318216			
Read Settings	Available iDrive controller modes:			
Factory Defaults	4-3-3 Firmware Update Mode 5-5-4 PNP Module Reboot 5-5-2 USB Global Debug activation			
FDL Defaults	5-5-3 OSD Coding Mode 5-5-5 Automatic/Manual mode of operation 2-4-1 RAD Power turn ON			v
Options	selection			
	V Run Task Clear		Exit	



- 10. When you need to disconnect from the adapter click **Online/Connect** button again. Utility will disconnect from the adapter.
- 11. Button **Factory Deafults** will place adapter in Factory defaults mode.
- 12. Button **FDL defaults** will code to head unit (CIC type) basic settings such as: Removal of Legal disclaimer and Video in Motion.
- 13. Button **Clear** will clean up display of the utility.
- 14. Under **Options selection** drop down list you may select various options. Button **Run Task** will run selected task.
- 15. Options selection tasks:

Firmware Update mode – switch adapter to firmware update mode Read Current settings – reads current adapter settings and show them on display Reset factory defaults – Reset module to factory defaults Operation modes switch – toggle adapter mode between Manual and Automatic modes

HU FDL camera coding – code head unit (CIC) to operate with camera
HU OSD mode coding – code head unit (CIC) to operate with OSD menu built in camera
CAN Speeds – sets CAN speeds for adapter operation. Set by manufacturer.
Other modes also can be switched (ON/OFF) using this drop down menu.

BUILT IN OSD MENU OPERATION

- 1. **Camera module with dynamic lines** comes with built in OSD menu. Depends on the version of the camera and firmware type additional information can be shown on head unit display. Vehicle live data or external sensor values can be shown on display of head unit.
- 2. For OSD menu activation installer initially has to perform **Coding of the OSD mode** task via iClick or via PC utility (**HU OSD mode coding**). This has to be done once during adapter and head unit configuration.
- 3. OSD mode can be activated by long (3-5 seconds) press on 'Options' button on iDrive controller. When OSD menu is activated you will see it shown on display of head unit (see below).



4. Menus shown in picture below may be different from the ones in your adapter. This depends on the firmware version and adapter model.



- 5. Navigation through the menus can be done using iDrive controller by spinning idrive knob and selecting desired menu by pushing idrive know down.
- 6. To return to previous menu use 'Back' button. To exit use 'Menu' button

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FIRMWARE UPDATE MODE FOR CAMERA PNP MODULE

Remove your headunit and get access to the Camera Module. Do not disconnect adapter from headunit or from vehicle wiring. Plug micro USB cable into the slot on the adapter. Whenever firmware update procedure is required please follow the following steps:

 Following previously described procedure enter to the mode: **4-3-3** *Firmware Update Mode* Use iDrive controller to enter this mode.

Once headunit display switches off and then switches back on, you will see that your headunit's clock start to show the time counting from 0:00 to 23:23 nonstop. This confirms that you entered Firmware Update Mode for the Camera Module.

- 2. Connect USB cable to your Windows based laptop (sorry Mac owners, we do not yet support you).
- 3. Make sure that you have received new firmware update file from manufacturer.
- 4. Open File Explorer. You will see that new disk drive appeared in the system.



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- 5. Open newly appeared drive. You will see there is a file: firmware.bin
- 6. Delete this file from the drive.
- 7. Copy new firmware update file from your computer to the newly appeared disk drive. You should have only one! file on this drive now. Firmware update file may have a name different from firmware.bin Usually firmware update file has a name which includes firmware version, however the file extension should be .bin
- 8. Push iDrive controller knob down for at least 1-2 seconds. You will see that the display reboots once again. Your time information on the display will return to normal shortly. You are now exited the firmware update mode and returned to normal operation mode.

It is important not to interrupt process of file copying during the firmware update. Also it is important to make sure that you copied the correct firmware update file, received from the manufacturer to your Camera module. If the firmware update file which you received from manufacturer is in .zip or .rar archive format, please un-archive it first before copying to the Camera Module. You should copy to Camera Module only firmware update file and not any other files.

MANUAL FIRMWARE UPDATE MODE FOR THE CAMERA PNP MODULE

If for any reason your firmware update is not successful using the method above and your module can no longer enter the firmware update mode, you can use the Manual firmware update method described below.

For the software update of the Camera Module you will need to have the following:

- 1. Micro USB to USB adapter cable
- 2. Standard pen or pencil
- 3. Computer with at least one USB port available and Windows or iOS systems installed









In order to perform the firmware update, following the steps:

1. Disconnect!!! and remove PNP module from your vehicle.

Warning! It is strongly **NOT** recommended to connect the Camera Module to your PC via USB cable while Camera Module is still connected to the vehicle because this will 100% cause fatal damage to your USB ports and to your computer.

- 2. Plug USB cable to your Camera Module. There is a small Micro USB connector on the side of the module.
- Take a pen or pencil and use it to gently press a small button located on the side of the Camera Module, in the hole.
 Please do not push hard as it may damage the button.





- 6. Newly appeared drive will contain a single file called: firmware.bin
- 7. Delete this file (firmware.bin) completely from the drive.
- 8. Copy new software update file which you received from us onto the drive G:
- 9. Once the file is copied disconnect USB cable from your computer.
- 10. Disconnect USB cable from PNP cable and install PNP cable back to your vehicle.
- 11. Software update is now completed.



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This rearview camera integrates with the iDrive.

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This means that when you engage the reverse the camera will automatically turn on. However once you switch back to D (Drive) camera will stay on until you drive with certain speed (default value 12km/h). If you switch to P (Park) camera will switch off immediately.

Furthermore our rearview camera retrofit offers you additional features:

1. You can turn the camera on by pushing the iDrive controller back and holding it for 2-3 seconds. This allows you to get the camera image even when the vehicle is moving forward or is parked or is in neutral*.

2. You can turn off the camera by pressing and holding the BACK button on the iDrive controller for 2-3 seconds.

*Additional coding is required for this feature to work.





For all questions or other inquires please contact us at: **info@bimmerretrofit.com** or visit: <u>www.bimmerretrofit.com</u>

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