

**2015 F-150 8" MyTouch factory display
360° Vision System
(Kit # AVMS-3618)**

**DUE TO THE COMPLEXITY OF THIS KIT
PROFESSIONAL INSTALLATION IS REQUIRED
CALIBRATION KIT IS REQUIRED FOR FINAL PROGRAMMING**

-Must set dip switches in interface before it will work-

Please read thoroughly before starting installation and check that kit contents are complete.

Items Included in the Kit:

Video interface for 8" MyTouch display
2015 F150 Camera bracket for existing handle
360° camera module
Factory Hazard/360° dash button
Front camera w/grill mount and harness
2 side mount cameras w/pods and harnesses
2 video output RCA cables
Power/camera input harness
2 side camera templates
Mounting screws and gaskets
These instructions

Tools & Supplies Needed:

Wire strippers
Wire cutters
Electrical tape
Zip ties
Plastic panel removal tools
Screwdriver
7 mm socket
Drill
Large Uni-bit/drill bits
Hole saws
Torx bits



Safety Precautions:

- Work in well ventilated area that is clear of obstructions.
- Secure vehicle with tire chucks in both front and rear of tires.
- Turn vehicle accessories OFF and ensure ignition key is in OFF position.
- Wear safety goggles and snug fitting clothes.
- Use tools only for their intended purpose and which are in good repair.
- Only perform this task if confidence, skill, and physical ability permit.

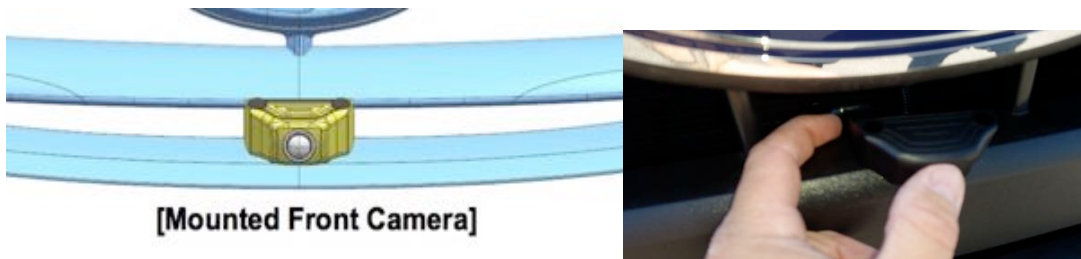
NOTE: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, as well as an installation video, please visit www.brandmotion.com

Section 1: Front camera installation

1. Front camera is mounted in the grill below the Ford emblem.
2. Mount camera in housing using the bracket and screws provided.



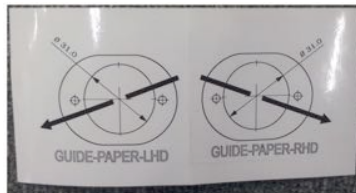
3. Mount the housing using the provided screws to the grill and putting the caps in the holes to close them.

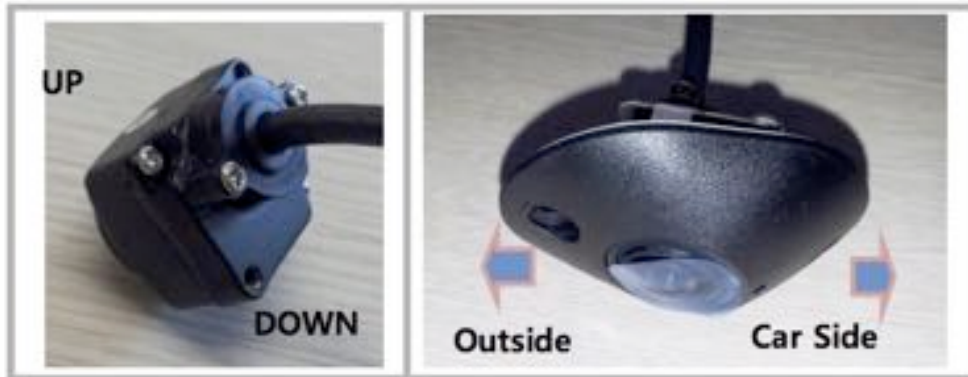


4. Run the camera harness along the under hood covering, down the drive side hinge. Zip-tie the harness to the hinge so the harness will not kink or cut.
5. Run harness into the vehicle through the factory grommet in the drivers side firewall.
6. Route the camera harness to the location of the 360° module.

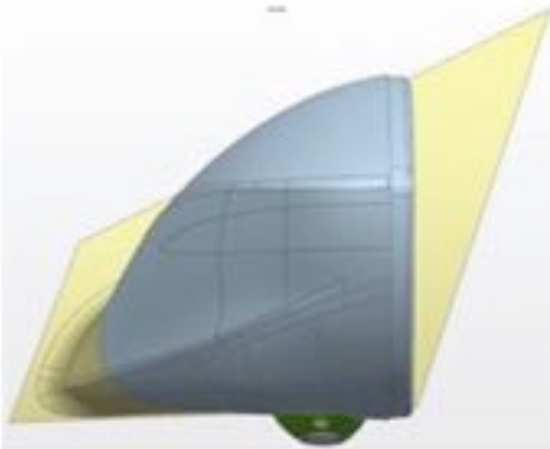
Section 2: Side Mirror Camera installation

1. The inner door panel will have to be removed for installation of the side cameras.
2. Begin working on the driver side door. With the door closed, place the template sticker (*marked LHD*) on the bottom side of the mirror with arrow aiming away from the vehicle and perpendicular to the side of the body. (*Do not go by mirror lines or angles.*)

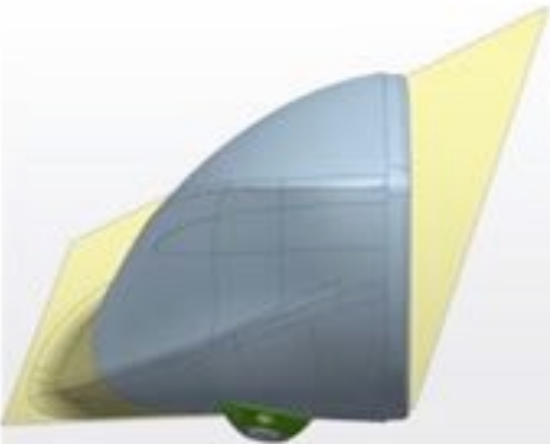




- **Right position & native image**
: Mount on the smooth bottom part of the side mirror



- **Wrong position & native image**
: Mount on the curved part of the side mirror → Image leaned to the front
(If this happens, it may be impossible to calibrate in calibration SW which given to installers, please contact to technical center)



Camera	Angle Range (Degrees)			Mounting Height inches
	Tilt	PAN	ROTATION	
Front Camera	25~35	-1~1	-1 ~ 1	26-118
Left Camera	30 ~ 35	-5~5	-1 ~ 1	26-118
Right Camera	30 ~ 35	-5~5	-1 ~ 1	26-118
Rear Camera	25 ~ 35	-1~1	-1 ~ 1	26-118

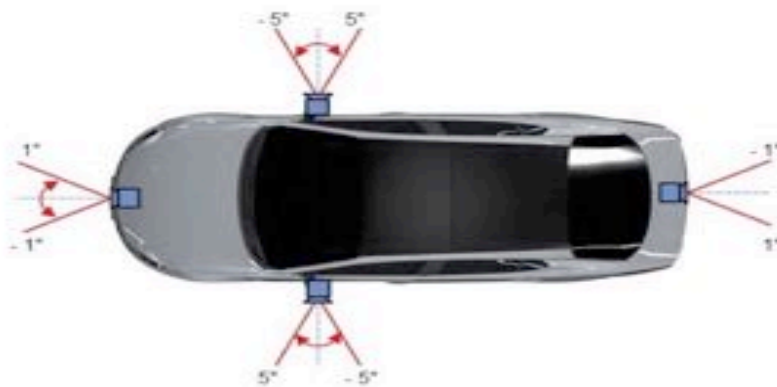
* Mounting height may vary depending on the vehicle model.



[Left/Right Tilt and Front/Rear Rotation Angle Range]



[Front/Rear Tilt and Left/Right Rotation Angle Range]

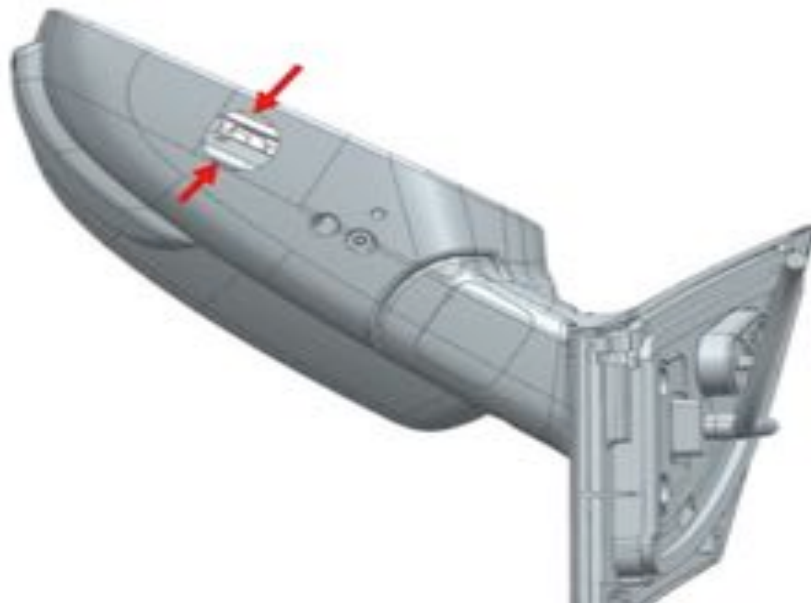


[Pan Angle Range per Camera]

3. Make sure the template is to at least the middle to outer edge of the mirror. (*The camera needs to see only 10% of the side of the vehicle and mainly the ground and objects next to the vehicle.*)
4. Remove the door panel and the 3 nuts that are holding the mirror to the vehicle.
5. Place the mirror on a soft or padded surface and remove the glass from the mirror. (*Each vehicle is different, but most are mounted by a center circle and will unclip from it.*)



6. After the glass is removed, check to see if where the templates are placed there is clearance for the camera and will not cut into anything in the mirror housing. (*If the template has to be moved make sure to keep the arrow aiming the same way.*)
7. Drill a 1 1/8" hole in the bottom of the mirror using a hole saw or uni-bit to the size on the template.



8. With the sticker still in place, drill the (2) mounting screw pilot holes with a 1/16" drill bit. (*Do not go all the way though.*)

9. The side cameras, brackets and pods are labeled for right (RH) and left (LH). [See red boxes in image below.] Make sure to assemble them correctly. Use caution not to lose the tiny screws to mount the cameras to the brackets and the brackets to the pods.



LH – Driver's side camera

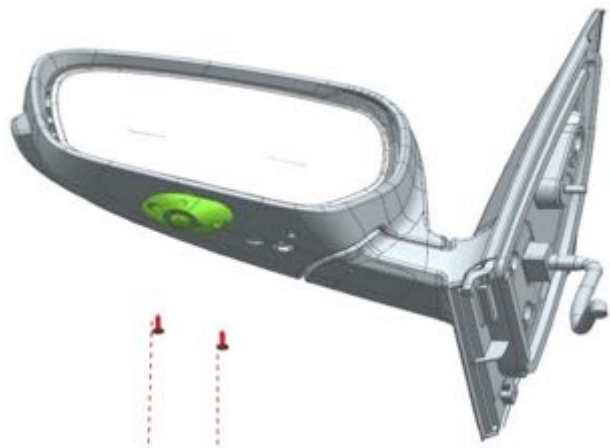
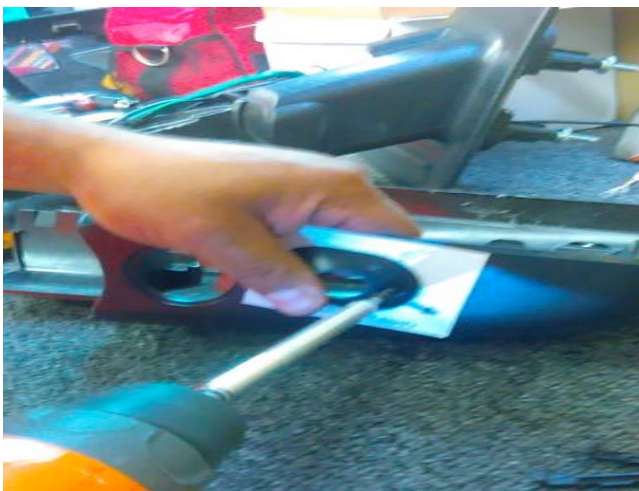


RH- Passenger side camera

10. Using the LH camera assembly, attach the foam gasket to the bottom side of the pod, lining up the notch in the foam with the bump on the pod.



11. Remove the tape from the foam gasket and mount the camera pod to the mirror. Use the self-tapping screws provided to mount the pods to the underside of the mirror. (*Do not over tighten the screws, it may strip out the plastic.*)



12. Route the camera cable through the mirror and out of the mounting side of the mirror. Make sure not to block any movement of the mirror glass or folding.

13. Route the cable in the door and remount the mirror to the vehicle.
14. You will next pin the camera cable wires into the provided connector. Inset the pins into the connector until they make a "snap" sound. Use the left side camera harness to match up where the pin locations are. *(See Diagram chart 1a. at end of instructions for all camera pin connections.)*
15. Attach the camera cable to the harness and route through the door to the rubber boot. Secure the harness to the factory wire harness with zip ties.
16. Route the harness out through the rubber boot into the vehicle. *(The vehicle might have a Molex or plastic plug in the door of body, if so drill a hole in the plug if there is any room to, if not drill a hole lower in the door just under the rubber boot and the same if the plug is in the body. Grommet and seal any holes that might be drilled.)*
17. Route the harness to the 360° module.
18. Reinstall the mirror glass into the mirror and reinstall the door panel.
19. Repeat the process on the passenger side door and then continue to the next section.

Section 3: Rear camera installation

1. Remove the trim panel on the backside of the tailgate, by removing the Torx screws holding it in place.



2. Unclip the latch rods that go to the handle. Unplug the rear camera harness from the camera.
3. Loosen the (2) 10 mm nuts holding the handle in place.
4. Remove the handle and place on protected surface. Remove the T-20 Torx holding in the factory camera bracket and remove camera.



5. Cut plastic tab on the back of the handle (looking from the back). It is on the right side of the camera hole, lower tab.



6. Open the camera hole using a uni-bit to $\frac{3}{4}$ ".



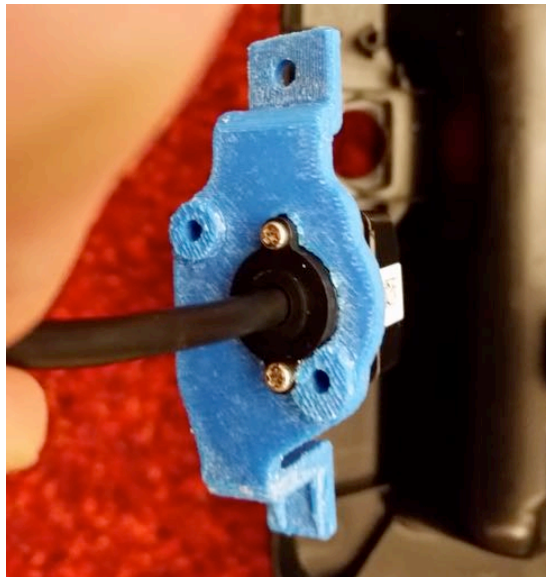
7. Clean up hole with a deburring tool.



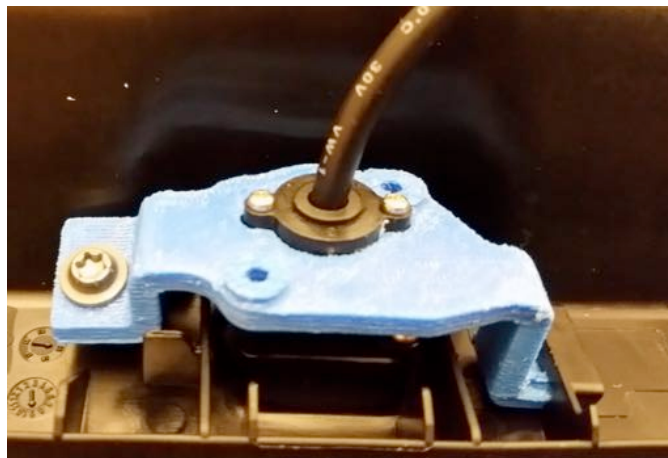
8. Check to make sure new included camera bracket fits into the slot and screws down with T-20 Torx.



9. If fit is good, remove bracket and route camera wire through hole and insert camera into bracket with white sticker pointing up.



10. Mount bracket with camera back to handle using the T-20 Torx.



11. The camera should fit tight in the hole and sit in slightly. (About an 1/16")



12. Connect the camera cable to the rear camera harness and heat shrink or tape the connection.

13. Route the harness through the tailgate and into the lower bed frame. *(If holes do not exist in the tailgate or bed frame you must drill new holes in to each to run harness. Make sure to use grommets and seal up holes to prevent rust or cutting of harness.)*



14. Route the harness on the underside of the vehicle. Use zip ties to hold harness in place and be careful to avoid any moving parts or exhaust.



15. Route the harness in to the vehicle by coming up through a grommet in the floor or the grommet under the hood in the firewall.

16. Route the rear camera harness to the 360° module.

Section 4: 360° module installation

1. Connect the correct camera plugs to the 360° module. Front, rear, left side, right side, CVBS and CVBS RV.
2. The CVRS output, is video output controlled by the power on/off button to the system. It is connected to the video input on the mirror or AUX video on the interface.
3. The CVRS RV output, is video output when the accessory is powered on. It is connected to the camera input on the mirror or camera input on the interface.
4. If not done so yet connect the power harness to the 360° module. Wire up the power connections, yellow is constant, red is accessory, black is ground, blue is reverse.
5. Do not mount the 360° module, you will need to get to it for calibration of the cameras.
6. Plug in the Key Box and mount to the right side of the steering column on the dash trim with the tape provided.



7. To turn on the system press the power button on the Key Box. To change camera views press the car image button. A long press will show a full front view another long press will show a full rear view.
8. Place the vehicle into reverse to see the rear camera image on the screen.

Section 5:

Installation of the 8" MyTouch interface

1. Remove the trim around the screen/display in the dash.



2. Remove the (4) 7mm bolts holding in the screen/display. Pull screen forward out of dash.



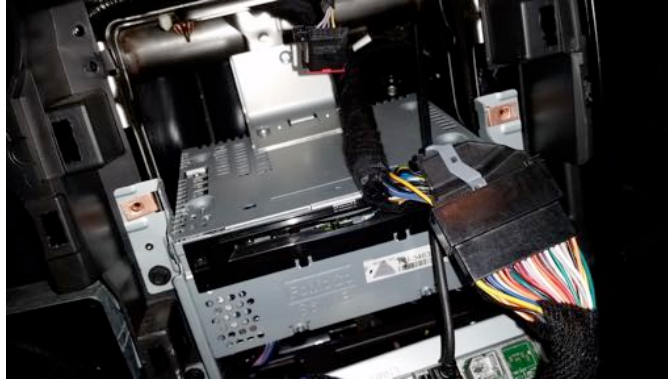
3. Remove the large plug to the left of the screen by lifting the handle like plug.



4. Plug the harness into the 9002-2781 module and the male side of the T harness into the back of the screen where the factory harness was just removed. Make sure the handle is locked back in the down position.



5. Plug the female end of the T harness into the factory harness. Make sure the handle is locked back in the down position.



6. Remove (if plugged in) the 4-pin to 6-pin adaptor. It is not need for installation.
7. Connect the 6-pin harness to the 9002-2781 module. On the other side of the module connect the 12-pin harness.
8. Use red for accessory, black for ground, purple for reverse.

Section 6: Installation of the factory Hazard/360° button

1. Make all the camera and video connections to the 360° module. Connect the Key Box harness and route to the top right button location on the dash trim that was removed.
2. Plug the hazard/360° button supplied into the upper right location harness. (*It was the factory harness that plugged into the hazard button on the top right on the dash trim that was removed.*)



3. Connect the green wire from the Key Box harness, to the white wire on the factory harness that goes to the hazard switch. *(The white wire is the second wire from the left with the wires pointing away from you.)*

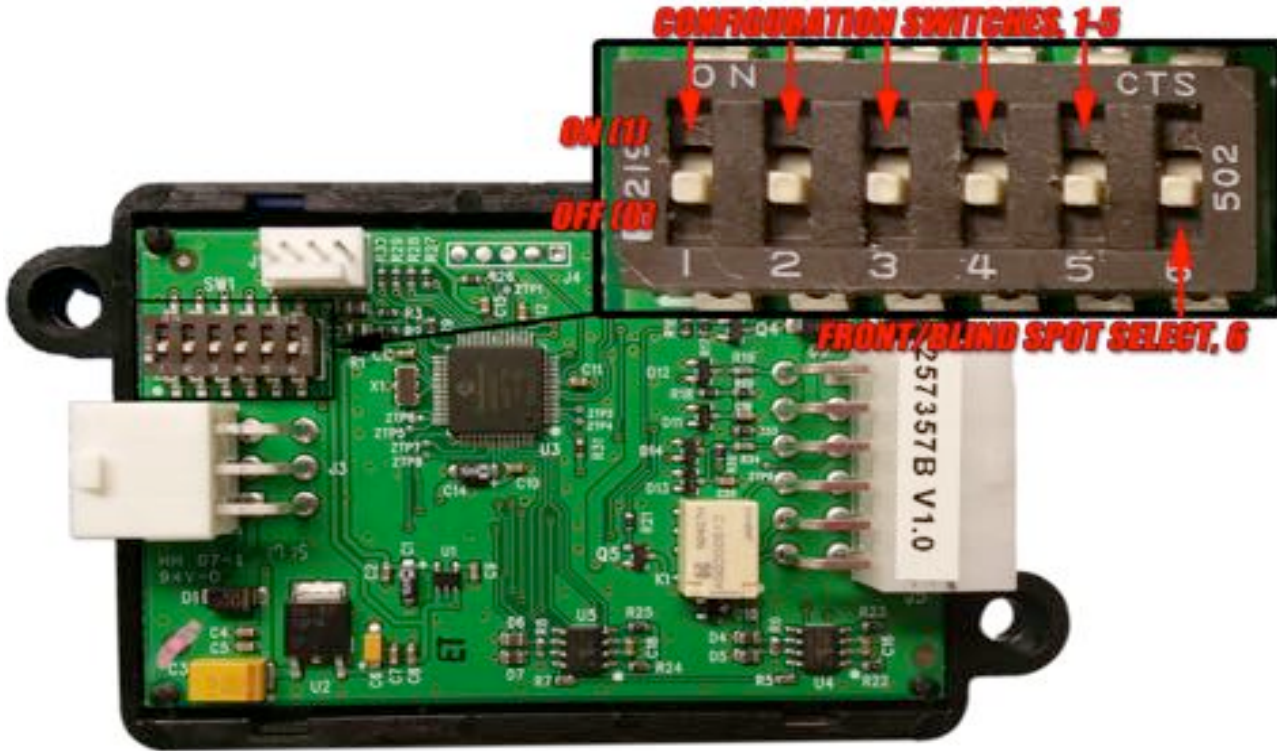


4. The red wire is for loading the calibration files to the programmer, it will need to be grounded in a later step in the calibration instructions.
5. Press the 360° button to turn on the system. Each press will change to a different view. A long press will show a full front view, another long press will show a full rear view.
6. Press the 360° button 3 times fast, within 1 second to turn the system off.
7. Place the vehicle in reverse and see if you have a rear camera image displayed on the screen.
8. Proceed to the calibration instructions included in the calibration kit.
9. After the camera calibration steps are complete, reassemble the vehicle in reverse order.
10. Unplug the hazard/360° switch that was plugged in for testing.
11. Remove the factory hazard switch from the dash trim. The top right button



12. Clip the new hazard/360° button in its place and reassemble the dash trim.





The DIP switches should be set as follows:

10010 | MyFord/MyFord Touch

1-UP/ON

2-DOWN/OFF

3-DOWN/OFF

4-UP/ON

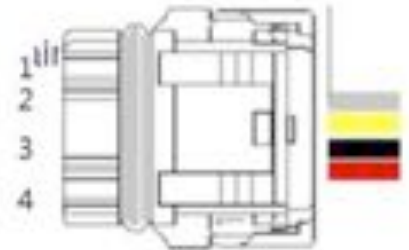
5-DOWN/OFF

6-DOWN/OFF

Diagram 1a.

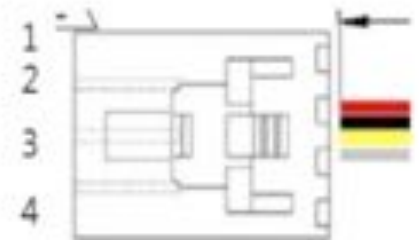
1.2.2 Front Camera Connector pin map

Pin No.	Description
1	V-GND(White & Drain)
2	Video(Yellow)
3	Power_GND(Black)
4	Power(Red)



1.2.3 Rear Camera Connector pin map

Pin No.	Description
1	Power(Red)
2	Power_GND(Black)
3	Video(Yellow)
4	V-GND(White & Drain)



1.2.4 Side Camera Connector

Pin No.	Description
1	Power(Red)
2	Power_GND(Black)
3	Video(Yellow)
4	V-GND(White & Drain)

