

#### INSTALLATION INSTRUCTIONS

# 2012-2014 F-150 4" MyFord factory display 360° Vision System (Kit # AVMS-3604)

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

#### **Items Included in the Kit:**

Video interface for 4" MyFord display 2004-2014 Tailgate handle w/camera

360° camera module

Key box power/image buttons

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

#### **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

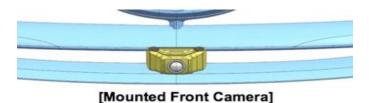
- 1. Front camera is mounted in the grill below the Ford emblem.
- 2. Mount camera in housing using the bracket and screws provided.







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



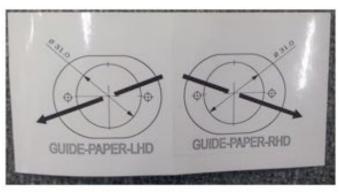




- 4. Run the camera harness along the under hood covering, down the drive side hinge. Zip tie the harness to the hinge so the harness will not kink or cut.
- 5. Run harness into the vehicle though the factory grommet in the drivers side firewall.
- 6. Route the camera harness to the location of the 360°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

# Section 2: Side Mirror Camera installation

- The inter door panel will have to be removed for installation of the side cameras.
- 2. 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. Perpendicular to the side of the body. (*Do not go by mirror lines or angles*.)



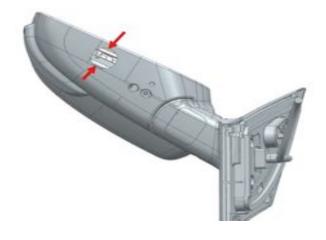


#### INSTALLATION INSTRUCTIONS

- 3. Make sure the template is to at least the middle to outer edge of the mirror. (*The camera needs to see only a little 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 hole in the bottom of the mirror using a hole saw or Uni-bit to the size on the template. Which is 1 1/8"



AVMS-3604.doc Page 2 of 9



- 8. With the sticker still in place, drill the (2) mounting screw holes with a 1/16 drill bit. (*Do not go all the way though*.)
- The side cameras, brackets and pods are labeled for right-RH and left-LH. Make sure to assemble them correctly. Use caution not to loss 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.



#### INSTALLATION INSTRUCTIONS

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 though 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 connecter. Inset the pins into the connecter 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 though the door to the rubber boot. Secure the harness to the factory wire harness with zip ties.
- 16. Route the harness out though 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 jus 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. The rear camera on this vehicle will be in the tailgate handle. The camera is already mounted to the handle.
- 2. Remove the trim panel on the backside of the tailgate, by removing the Torx screws holding it in place.



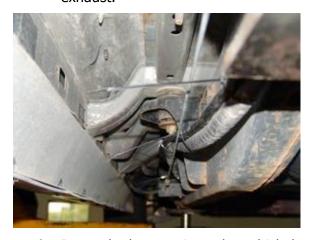
- 3. Unclip the latch rods the go to the handle. (*If equipped with a rear camera, unplug it from the harness.*)
- 4. Loosen the (2) 10 mm nuts holding the handle in place.

#### INSTALLATION INSTRUCTIONS

- 5. Remove the handle and install the new handle with the 360° camera installed.
- 6. Connect the camera cable to the rear camera harness and heat shrink or tape the connection.
- 7. 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.)



 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.



- 9. Route the harness in to the vehicle by coming up though a grommet in the floor or the grommet under the hood in the firewall.
- 10. 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 das 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.

#### INSTALLATION INSTRUCTIONS

#### Section 5:

#### Installation of the 4" MyFord interface

- 1. Remove dash trim around screen/display in dash.
- 2. Remove the (4) 7mm screws holding the screen into the dash.
- 3. Remove the screen from the dash.



- 4. Check compatibility of screen/display on the last page of this install guide.
- 5. Remove the 6-pin connector from the harness, if connected, then plug the harness into the 6-pin connector on the 9002-2780 module included in this kit.
- 6. Connect the 12-pin power output and camera input harness to the 9002-2780 module.
- 7. Disconnect the FCDIM/display harness on the back of the display by pushing down on the tab and pulling the "lever" back.
- 8. Connect the T-harness into the FCDIM first from the 9002-2780.



Page 5 of 9



9. Then connect the opposite end to the vehicle harness, within 5 seconds turn the key to the run/ignition position. (Do not start the vehicle)



- 10. With module connected to vehicle specific T-Harness, and display connected, power vehicle on to IGN (Do not start vehicle).
- 11. With vehicle ignition turned on and radio display on and connected, connect the two jumper wires together. This will initiate the programming procedure.
- 12. Within 10 seconds radio display should display "Diagnostics mode" and shut off. Radio display will turn back on, and should shut off one more time. Once radio and display have shut down twice and came back on, programming is complete. The entire process should take less than two minutes.
- 13. If the programming does not work successfully, disconnect module power, verify the dip switch settings, reconnect module, turn the vehicle off and then on again, and try again.
- 14. Disconnect and isolate the jumper wires to prevent accidental programming.
- 15. Test programming by placing the vehicle in reverse. (Testing without a camera will result in a "camera not available" message and disable the camera input temporarily.

#### INSTALLATION INSTRUCTIONS



16. Mount module to top of radio/cd case in dash, behind screen.



# **Important Notes:**

- If Camera is tested before camera is powered and connected, system must be fully shut down and turned back on before camera will work again.
- Depending on vehicle configuration, display may stay in reverse camera mode until vehicle is driven to a predetermined speed. This is a factory function.
- Some displays will show a magnifying glass (zoom) icon on the display. This is meant to be used with an OEM Camera with zoom function. It is not compatible with any aftermarket cameras and cannot be disabled.

AVMS-3604.doc Page 6 of 9



#### INSTALLATION INSTRUCTIONS

#### **Unprogramming/Reset to factory**

This module can be used to return the vehicle to factory in the case the customer wants it uninstalled. Once this is complete the module can then be used on another VIN. Until the unprogram routine is run, the module is locked to the VIN of the vehicle it is currently installed in.

To unprogram the vehicle, disconnect the module, set the DIP switches to the corresponding "Unprogram" profile, reconnect the module and wait for the display to reset twice the same as in the programming procedure.

Find the part number on the back of the display and verify compatibility.

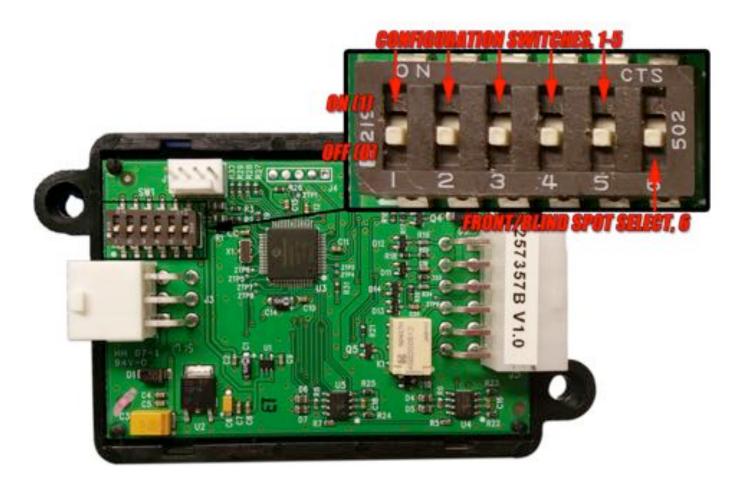


# **INSTALLATION INSTRUCTIONS**

COMPATIBLE DISPLAYS		INCOMPATIBLE DISPLAYS
BOST-DCSH-CK	UINT-INCHI-CA	BRAT-SACIN-CS
HEAT-DCHI-CP	DE41-INCLIN-OR	BERTHUMEN
CHEL-DCTH-CC	DESCRIPTION	CERT-INDISS-AA
CHIT-IPCHI-CD	DDIT-NCHACO	CEXT-IMPS-AD
CBMT-RICHH-DC	DEST-INCESS-GR	CATE-ISBNS-GC
CHIT-I9CLIE-GD	DT4T-I9C(III-QD)	CHT-DANSEGE
COST-100911-CF	EART-HIRRS-CH	CANTIONNAME
CMST-IMBRITATE	CHITCOHORS-GA	CNST-188955-LB
CMET TRIBUTOR	1301-10003-CC	CMST-(MINES-AD)
CMST-180915-GD	EBST-DCDB-CA	CSET THURS CE
CMOT-1809US-GE	AMST-INCLIN-CO	CMST-HUNSS-GF
CMST-IMBN-00	FOLE-BIRRIS-CA	4.3051-13009-AD
BART-BBRSS-CD	EGCT-MB915-CD	10000 100000-00
DAKE-IMMOS-CE	E357-100005-CC	ELANT-100000-000
BHST-190316-CA	EJST-180995-GA	DASS CARROS CO
DRIE-HICHWORE	TLTC HIROSOCK	ERECTION OF
D097-190216-0A	SSET-HRES-CF	EMST-IMPROCA
DOT-DCHI-CO	1507-10009-0	ENER IMPOSED
DOST-DIRECT-CD	EXPERIMENTAL.	
DEST-THROS-CC	1571-10005-CB	
DEST-HUNDS-CD	ETELISMISCO	
DETECTIONS OF	ETHT-PC10-00	#S
DEST-IMMES-CO	FROT-PICTH-CA	MIII
D575-180005-CY	PRET-PICTIO-GA	
DATE-HARMANCE	FOIT-IMPRISON	

# BRANDMOTION seamless vehicle personalization

## **INSTALLATION INSTRUCTIONS**



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