

**Dual Camera Blind Spot Monitoring System w/Multi-Camera Switcher
(Kit # 9002-2904)**

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

Items Included in the Kit:

- 2 Adjustable angle cameras
- 2 Camera pods
- 2 Chassis harness
- 2 Foam gaskets
- Mounting screws
- 2 Power/video harness
- 2 Hole saws
- 2 Angle adjustment tools
- 6-way video switcher
- These instructions

Tools & Supplies Needed:

- Wire strippers
- Wire cutters
- Electrical tape
- Zip ties
- Plastic panel removal tools
- Digital Volt Meter / BCM safe test light
- Screwdriver
- Socket set
- Wrench

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

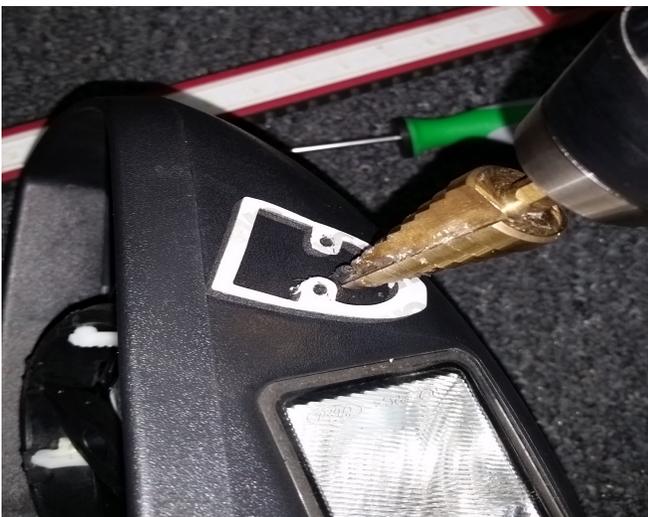


INSTALLATION INSTRUCTIONS

1. Remove the inter door panel to gain access to the wiring and side view mirror mounting bolts.
2. Use the foam gasket and attach it to the bottom of the mirror plastic. Attach it so the flat area aims towards the rear of the vehicle.



3. Carefully remove the mirror glass from the mirror. Each vehicle is different; consult the vehicles service guide for how to steps.
4. Remove the mirror from the vehicle housing from the vehicle.
5. Drill 2 pilot for the mounting screws and drill a hole in the center of the camera pod opening for the harness to be ran through.



6. Mount pods by screwing from the inside of the mirror. *Using a Phillips number 1 tip with a 1/4 wrench works the best.*



7. Run the camera harness into the mirror and through the arm of the mirror, into the door.



8. Run the camera harness into the vehicle through the door boot.

INSTALLATION INSTRUCTIONS

9. Connect the video/power harness to the chassis harness that was just ran into the vehicle.
10. Connect the Black wire to ground and the Red wire to accessory 12 volt power.
11. Repeat for the other the door.
12. Connect the Yellow video RCA form the camera to the correct RCA input. Left or right depending on the door that is being worked on.
13. Connect the trigger wires from the video switcher to the positive turn signal wires. Left input trigger wire is purple, the right input trigger wire is pink.
14. Connect the Blue (reverse trigger output) wire from the video switcher to the aux trigger input on the dual camera interface.
15. Connect the video output RCA from the video switcher to the input of the interface or video display.
16. The dip switches have to be set on the video switcher for the turn signal input wires to be able to trigger the switcher.
17. Check the angle and view, if the angle needs to be changed use supplied tool to adjust the angle of the camera.
18. Reassemble the vehicle in the reverse order.



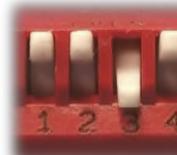
DIP SWITCH 1: UART CONTROL

UP: UART command control ONLY. For future use.
DOWN: Analog triggers ONLY. Standard universal control.



DIP SWITCH 2: TURN SIGNAL CONTROL

UP: Turn signal cameras will only stay active for 12 seconds.
DOWN: Turn signal cameras will display as long as there is a 12v signal to the module.



DIP SWITCH 3: TURN CAMERA OVER RVC

UP: When in reverse, if active, turn signals will display instead of RVC.
DOWN: RVC has priority regardless of turn signal inputs.



DIP SWITCH 4: FRONT CAM ACTIVATION

UP: Using a momentary button to activate **input 2** will display F-CAM for 12 seconds.
DOWN: Front CAM will display as long as there is a 12v signal to the module.

INPUT	LED 1	LED 2
Idle	Fade in/out	Fade in/out
RVC	ON	
FVC		ON
Right Turn		ON (blink)
Left Turn	ON (blink)	
AUX VID	ON (solid)	ON (solid)
Trailer CAM	ON (alternating)	ON (alternating)

FOR INSTALL IN TOYOTA

1. Locate the 28 terminal connector on the back of the radio.
2. Unplug the connector and test terminal #2 for a reverse trigger by using a multi meter. Place the vehicle in reverse while checking the wire and watch for the wire to change to 12 volts.
3. If wire is correct cut wire about 3 inches away for the connector.
4. Connect the wire from the connector to the blue wire on the 6-way video switcher.
5. Connect the other half of the cut wire that is coming from the vehicle side to the white/black wire on the 6-way video switcher. *(See diagram #1)*
6. For the video – locate the 24 terminal connector on the back of the radio. (It will be 2 rows of 12 terminals).

For vehicles with a factory backup camera.

1. Cut the wires that are to the factory back up camera. They are terminals 12 and 24. Cut them about 3 inches away from the connector.
2. Attach a female RCA end to the wires that are coming from the connector. Terminal #12 is the positive video; terminal #24 is the video negative video.
3. Attach a male RCA end to the wires that are coming from the vehicle harness. Terminal #12 is the positive video; terminal #24 is the negative video.
4. Connect the female RCA from the factory connector to the video out of the 6-way switcher.
5. Connect the male RCA from the factory wire harness to the rear cam input on the 6-way video switcher. *(See diagram #2)*

For a vehicle that is using the 9002-2730/ vehicles with out a factory backup camera

1. Cut the wires that are to the factory back up camera. They are terminals 12 and 24. Cut them about 2 inches away from the connector.
2. Attach a male RCA end to the wires that are coming from the vehicle harness. Terminal #12 is the positive video; terminal #24 is the video negative video.
3. Plug the 9002-2730 into the place that the 24 terminal connector was removed from.
4. Plug the factory connector into the female end of the 9002-2730 harness.
5. Connect the female RCA from the 9002-2730 to the video out of the 6-way switcher.
6. Connect the male RCA from the factory wire harness to the rear cam input on the 6-way video switcher. *(See diagram #2)*

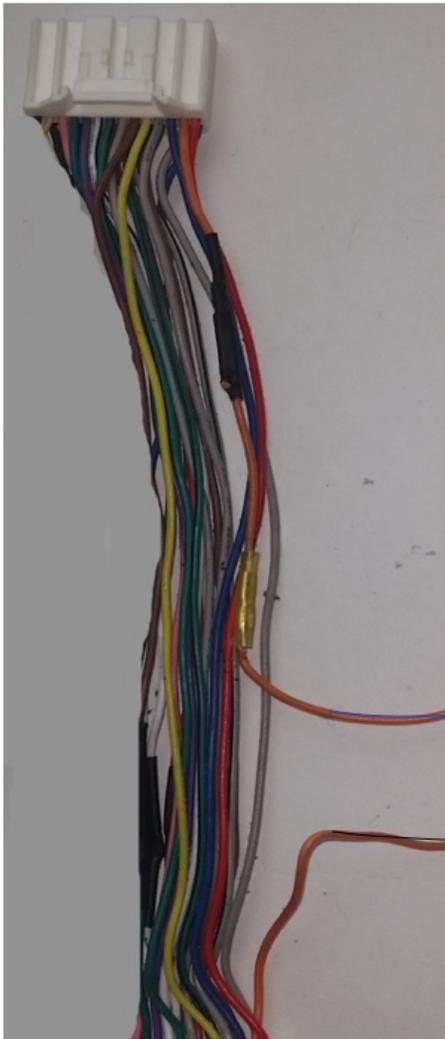
Continue with the install instructions on the rest of the install

1. Connect the left camera to the left RCA input of the 6-way video switcher.
2. Connect the right camera to the right RCA input of the 6-way video switcher.
3. Connect the right turn signal wire (pink) of the 6-way video switcher to the right signal wire of the vehicle.
4. Connect the left turn signal wire (purple) of the 6-way video switcher to the left signal wire of the vehicle.

DIAGRAM #1

TERMINAL #2

28 TERMINAL CONNECTOR
ON BACK OF RADIO



CUT WIRE GOING TO
TERMINAL #2

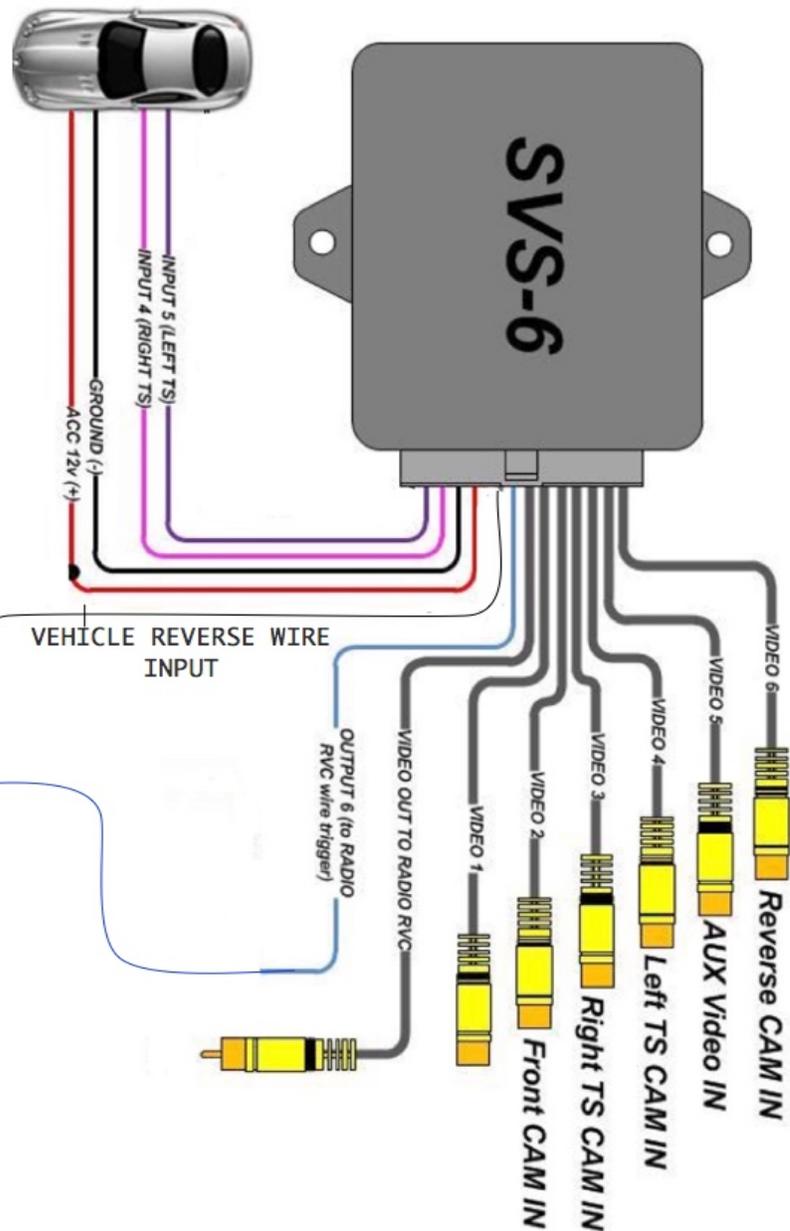


DIAGRAM #2



TERMINAL #12 (POSITIVE VIDEO)

TERMINAL #24
(NEGATIVE VIDEO)

24 TERMINAL CONNECTOR
(RADIO SIDE)

CONNECT TO THE VIDEO
OUT RCA OF THE 6-WAY
SWITCHER



CUT WIRES 12 AND 24
ADD A FEMALE RCA TO THE RADIO
SIDE CONNECTOR

ADD A MALE RCA CONNECTOR TO
THE CAR SIDE OF THE HARNESS



CONNECT TO THE
REAR CAM RCA OF
THE 6-WAY VIDEO
SWITCHER

