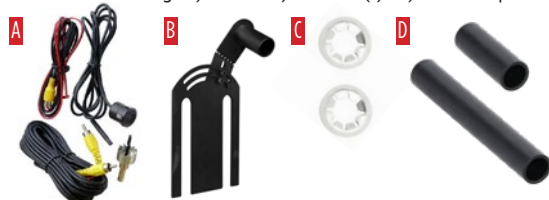




KIT COMPONENTS

- A) Camera and wiring • B) Bracket • C) Push nuts (2) • D) 2" & 5" Adapters



Multi-Adjustable Spare Tire Camera Kit

Fits JEEP WRANGLER JK 2007-2018

The TE-AJPKT is designed to mount a camera behind the tailgate mounted spare. This product is intended for integrating with multimedia type aftermarket head units with LCD displays.

KIT FEATURES

- High-quality metal housing
- 2" and 5" camera mount adapters
- 1/4" CMOS camera
- AHD & CVBS compatible
- Defeatable parking lines
- 110° viewing angle
- 0.5 lux night vision
- Rated IP68 (water-resistant & dust proof)

SPECIFICATIONS

- Resolution: 720 x 480 (CVBS), 1280 x 720 (AHD)
- Field of View: 110° (Horizontal), 170° (Diagonal)
- Min Illumination: 0.5 lux

WIRE LENGTH

- Camera Cable: 0.61m / 2ft
- Extension Cable: 6.7m / 22ft

NOTE: iBEAM recommends the part: TE-CAMFLTR (Pulse Width Modulation Stabilizer) be used if power is being connected via the taillight. (sold separately)

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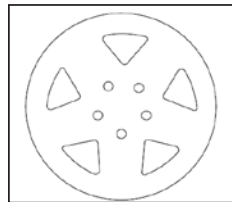
Visit iBeamUSA.com for more detailed information about the product and up-to-date vehicle specific applications

ATTENTION: With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections, especially the air bag indicator lights, are plugged in before reconnecting the battery or cycling the ignition to test this product.
NOTE: Refer also to the instructions included with the aftermarket accessory before installing this device.

TIRE REMOVAL & CAMERA MOUNTING

Tire Removal & Camera Mounting:

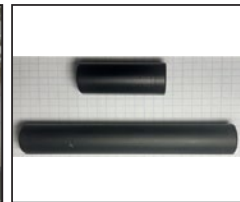
1. Verify the spoke pattern is the correct one for this installation. (Fig A) (Fig B)
2. The TE-AJPKT has two adapters (Fig C) that can be interchanged to allow the use of the spare tire camera mount on a vehicle with larger aftermarket rims mounted on the spare tire mount.
3. Loosen the 11/16 nut with the threaded insert to allow the adapter to be removed. (Fig D)
4. Remove the current adapter from the mount. (Fig E)
5. Install the desired adapter onto the mount. (Fig F)
6. Remove the tire from the vehicle mount. (Fig G)
7. Place the AJPKT bracket over the two top-most mounting studs, with the camera mounting tube facing out. (Figure H)
8. Place the press clips over the studs with their tabs facing out.
9. Use a 3/4 (18mm) deep socket and a hammer to drive the clips onto the studs. The clips are designed to retain the camera whenever the spare is temporarily removed.
10. Run the 4-pin camera cable through the camera mounting tube on the bracket and route to the factory grommet to the left of the spare tire carrier. Do not fully insert the camera yet. Leave a couple inches of wire free.



(Figure A)



(Figure B)



(Figure C)



(Figure D)



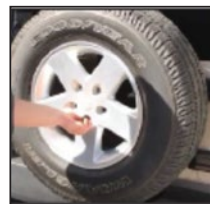
(Figure E)



(Figure F)

INSTALLATION TOOLS & ACCESSORIES REQUIRED

- Wheel lug wrench
- 3/4 18mm deep socket
- T27 Torx driver
- 4mm (5/32") Allen hex wrench
- Panel popper/push pin remover
- Soft plastic trim removal tool
- 10mm socket and ratchet
- Wire loom (convoluted plastic 1/4" or Techflex® braided)
- Electrical tape
- Zip ties
- Solder and soldering iron or solderless connectors for wire splicing



(Figure G)



(Figure H)

WIRING INSTALLATION

1. Locate and remove the rubber grommet and insert the 4-pin camera connector through the existing hole in its center alongside the factory wires. (Fig I)
 2. From the inside of the tailgate, remove the louvered panel from the tailgate, then run the camera wire into the vehicle, following the factory wire loom in the tailgate. (Fig J)
 3. Once the camera wire is secure and cable tied to the factory wiring, re-install the grommet into the tailgate.
 4. Reinstall the louvered panel on the tailgate.
 5. Connect the camera extension harness to the 4-pin camera cable.
- Note:** There are arrows that line up on the connectors to assure proper connection
6. Route the camera extension harness through the vehicle along the factory wiring harness and to the radio cavity.

Continued on next page



(Figure I)



(Figure J)

BEST PRACTICE is to make connections before mounting to allow viewing of the camera on your screen, verifying proper operation with optimum angle and a view free of obstructions.

If AHD or Parking guideline adjustments are necessary, cut the white and green loops according to desired functions desired. (Outlined in Table A, below)

Table A: Resolution and Wiring Functions

Resolution	Parking Guide Lines	White Loop	Green Loop
480i (CVBS NTSC)	Off	Uncut	Uncut
480i (CVBS NTSC)	On	Cut	Uncut
720p (AHD)	Off	Cut	Cut
720p (AHD)	On	Uncut	Cut

Note: The camera must have 12V removed and reapplied before any loop function changes are recognized.

1. **WHITE** loop controls parking guide lines. Its behavior is affected by the **GREEN** loop.
2. **GREEN** loop enables AHD (Analog HD) video output. The higher resolution method of transmission gives superior quality images, but is only compatible with AHD capable monitors and displays.
3. **UNCUT**, the camera displays standard NTSC video at 480i resolution.
4. **CUT**, the camera transmits at 720p resolution. (See Table A).

WIRING CONNECTIONS

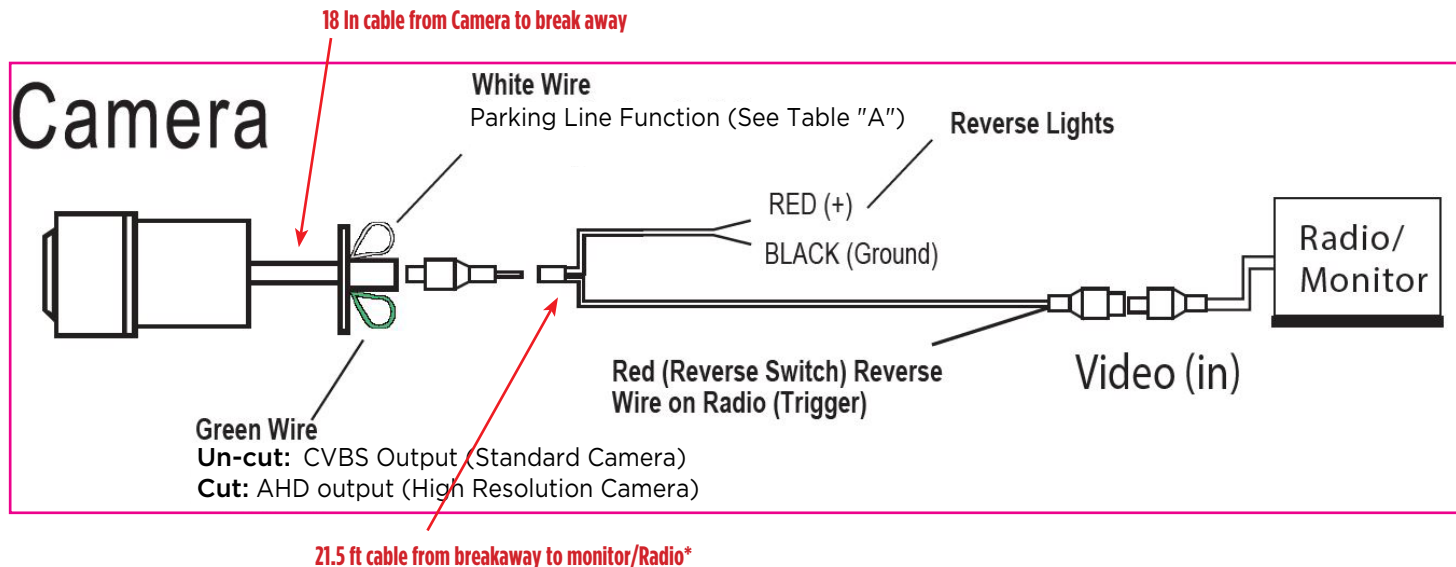
RED WIRE

1. Connects to +12-volt switched voltage to power the camera. It runs through the length of the video cable, and can be connected at either end of the cable.
2. If the **RED** wire is connected to the +12-volt reverse light wire in the back of the vehicle, the other side of the **RED** wire exiting the **YELLOW RCA** connector at the opposite end of the video cable will be supplied 12-volts that can be used to trigger the reverse input of the aftermarket in-dash radio.
NOTE: Some vehicles with LED lighting use an unsuitable pulsed DC voltage on reverse lights.
3. If a stable +12 reverse voltage is NOT available at the camera location, it can be supplied at the opposite end of the cable to the **RED** wire at the **YELLOW RCA** connector.
4. If the display has the ability to display the camera while in forward motion, a switched 12-volt accessory power may be connected to either end of the **RED** wire, but the radio will need a separate reverse +12-volts to activate the reverse screen.
NOTE: Many aftermarket radio installation data interface harnesses can supply both 12V reverse and switched accessory power.

BLACK WIRE

1. Connects to ground. (A metal, non-painted surface or factory ground wire)
If the ground is made outside the vehicle, paint, undercoating or dielectric grease should be applied over the ground connection for corrosion resistance.

WIRING THE CAMERA

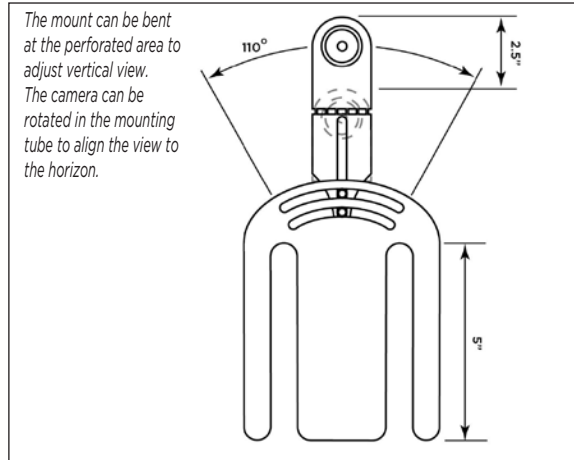


*If more length is needed use: **MPS-ECR36**: 36 inch extension cable
MPS-ECR72: 72 inch extension cable

HARNESS INSTALLATION

TIRE REINSTALLATION/CAMERA CALIBRATION

1. Reinstall the spare tire oriented so the camera has a clear view between the spokes of the wheel.
2. View the image on the head unit.
With the wheel lugs loose, the camera mounting bracket can be shifted vertically, and the camera mount can be swiveled on the bracket.
3. Do not push the camera into the tube prematurely as it is difficult to remove once inserted.
4. To prevent water ingress into the mounting tube, seal the back of the mount where the cable exits with butyl rubber putty or silicone RTV sealant.
5. Torque the spare tire's lug nuts to spec. (59ft/lb. spare tire torque per Jeep recommendations).





SPECIFICATIONS

TE-FLC	Reverse Camera
Chip Sensor	H63 CMOS
Resolution NTSC (CVBS)	720H x 480V
Resolution AHD	1280H x 720V
Viewing Angle	110°(H) / 170°(Diagonal)
Video Output	AHD/CVBS (Composite Video)
Minimum Lux	.05 Lux
Power Supply	DC 12V
Video Output Voltage	3.3V
Connector	Mini 4-PIN with Guideline/AHD Loops
Video Cable	6.5 meters (21.5 feet)
Working Current	90mA
S/N Ratio	>52dB
Water Resistance	IP68 (dustproof/water tight 1.5M)
Operating Temperature	-40°C - 80°C

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Or via email at:

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