

DirectWire

2024 Toyota RAV4 Hybrid (Smart Key) - North America - Requested by ampire.de

Wiring Information

| Item | Wire Color | Polarity | Wire Location |
|----------------------|---------------------------|----------|---|
| 12 Volts | White (50A) | + | Dash Fuse Box, white 1 pin plug (4L), pin 1 |
| Second 12 Volts | Pink (7.5A) | + | Certification ECU behind glove box, top white 27 pin plug, pin 4 |
| Ground 2 | White/Black | - | Certification ECU behind glove box, top white 27 pin plug, pin 18 |
| Starter | Blue | + | Left of Dash Fuse Box, white 20 pin plug (AG4), pin 5 |
| Second Starter | Blue (alternate location) | + | Certification ECU behind glove box, top white 27 pin plug, pin 27 |
| Ignition | Pink | + | Dash Fuse Box, white 32 pin plug (4F), pin 13 |
| Accessory | Green | + | Dash Fuse Box, rear, white 56 pin plug (4A), pin 30 |
| Ignition Interrupt | Blue | Cut | Certification ECU behind glove box, top white 27 pin plug, pin 17 |
| Ignition Interrupt 2 | Blue (alternate location) | Cut | Dash Fuse Box, rear, white 56 pin plug (4A), pin 17 |
| Telematics Interrupt | Black | Cut | Dash Fuse Box, rear, white 56 pin plug (4A), pin 33 |
| PTS 1 | Gray | - | Push Start Switch, black 10 pin plug, pin 5 |
| PTS 2 | Blue | - | Push Start Switch, black 10 pin plug, pin 1 |
| PTS 3 | Gray (PTS 1 alternate) | - | Certification ECU behind glove box, top white 27 pin plug, pin 23 |

| Item | Wire Color | Polarity | Wire Location |
|------------------------|--------------------------|-----------------|--|
| PTS 4 | Blue (PTS 2 alternate) | - | Certification ECU behind glove box, top white 27 pin plug, pin 21 |
| CAN Bus High | Tan | Data | Body ECU on dash fuse box, black 30 pin plug, pin 5 |
| CAN Bus Low | Violet | Data | Body ECU on dash fuse box, black 30 pin plug, pin 4 |
| CAN Bus High 2 | Black (DIAG CAN) | Data | OBD-Data Link Connector, white 16 pin plug, pin 6 |
| CAN Bus Low 2 | Violet (DIAG CAN) | Data | OBD-Data Link Connector, white 16 pin plug, pin 14 |
| CAN Bus High 3 | Green | Data | Certification ECU behind glove box, top white 27 pin plug, pin 1 |
| CAN Bus Low 3 | White | Data | Certification ECU behind glove box, top white 27 pin plug, pin 2 |
| OBD 12 Volts | Red (7.5A) | + | OBD-Data Link Connector, white 16 pin plug, pin 16 |
| OBD Ground | White/Black | - | OBD-Data Link Connector, white 16 pin plug, pin 4 |
| IMMO Data | Lavender/Lt. Green (IMO) | Data | Left of Dash Fuse Box, white 20 pin plug (AG4), pin 3 |
| IMMO Data 2 | Lavender/Blue (IMI) | Data | Left of Dash Fuse Box, white 20 pin plug (AG4), pin 14 |
| Driver LF Antenna | Red | RF | Driver Kick, black 20 pin plug (JN1), pin 17 |
| Driver LF Antenna 2 | Red | RF | Certification ECU behind glove box, middle white 27 pin plug, pin 17 |
| Passenger LF Antenna | Lt. Green | RF | Passenger Kick, black 20 pin plug (IM1), pin 3 |
| Passenger LF Antenna 2 | Red | RF | Certification ECU behind glove box, middle white 27 pin plug, pin 15 |

| Item | Wire Color | Polarity | Wire Location |
|------------------------|---|-----------------|--|
| Rear LF Antenna | Red | RF | Passenger Kick, harness to rear |
| Rear LF Antenna 2 | Red | RF | Certification ECU behind glove box, middle white 27 pin plug, pin 13 |
| Rear Handle Switch | Black | - | Passenger Kick, harness to rear |
| Rear Handle Switch 2 | Black | - | Certification ECU behind glove box, middle white 27 pin plug, pin 26 |
| Security Light | Red | + | Instrument Cluster, black 38 pin plug, pin 7 |
| RDA | Green | Data | Certification ECU behind glove box, middle white 27 pin plug, pin 19 |
| Power Lock2 | Lt. Green (passenger switch) (if needed) | - | Dash Fuse Box, rear, white 32 pin plug (4D), pin 16 |
| Power Unlock2 | Gray (passenger switch) (if needed) | - | Dash Fuse Box, rear, white 56 pin plug (4A), pin 39 |
| Lock Motor | White | Reverse | Driver Kick, black 20 pin plug (JN1), pin 18 |
| Driver Unlock Motor | Gray | Reverse | Driver Kick, white 18 pin plug (JG1), pin 1 |
| Passenger Unlock Motor | Red | Reverse | Dash Fuse Box, white 36 pin plug (4H), pin 9 |
| Factory Alarm Arm | Lt. Green (key lock) | - | Body ECU on dash fuse box, black 21 pin plug, pin 18 |
| Factory Alarm Disarm | Tan (key unlock) | Double - | Body ECU on dash fuse box, black 21 pin plug, pin 17 |
| Parking Lights | Lavender/Red (rear only on models with auto-leveling headlight) | + | Dash Fuse Box, white 36 pin plug (4H), pin 30 |
| Parking Lights - | Green | - | Headlight Switch, white 40 pin plug, pin 3 |

| Item | Wire Color | Polarity | Wire Location |
|--------------------------|--|-----------------|--|
| Hazards | Pink | - | Hazard Switch, blue 6 pin plug, pin 5 |
| Turn Signal (Left) | Lavender/Lt. Green (LF); Lavender/Tan (LR) | + | Dash Fuse Box, white 32 pin plug (4F), pin 6 (LF); Driver Kick, black 12 pin plug (GN5), pin 12 (LR) |
| Turn Signal (Right) | Green or Lavender/Green (RF); Lavender/Black (RR) | + | Dash Fuse Box, white 32 pin plug (4F), pin 8 (RF); Driver Kick, black 12 pin plug (GN5), pin 1 (RR) |
| Headlight | Red | - | Headlight Switch, white 40 pin plug, pin 4 |
| AutoLights | Yellow | Cut | Headlight Switch, white 40 pin plug, pin 5 |
| Reverse Light | Blue | + | Dash Fuse Box, white 36 pin plug (4H), pin 10 |
| Reverse Light 2 | White (alternate location) | + | Radio, gray 28 pin plug, pin 28 |
| Left Front Door Trigger | Red | - | Body ECU on dash fuse box, black 30 pin plug, pin 1 |
| Right Front Door Trigger | Tan | - | Body ECU on dash fuse box, black 30 pin plug, pin 6 |
| Left Rear Door Trigger | Green | - | Dash Fuse Box, white 36 pin plug (4H), pin 24 |
| Right Rear Door Trigger | Lavender/Violet | - | Dash Fuse Box, rear, white 56 pin plug (4A), pin 31 |
| Dome Light | Lavender/Blue | - | Dash Fuse Box, rear, white 32 pin plug (4D), pin 29 |
| Trunk/Hatch Pin | Black | - | Dash Fuse Box, white 36 pin plug (4H), pin 34 |
| Hood Pin | Gray | - N.C. | Body ECU on dash fuse box, black 30 pin plug, pin 30 |
| Power Liftgate | Green | - | Power Liftgate Switch, black 6 pin plug, pin 5 |

| Item | Wire Color | Polarity | Wire Location |
|---------------------------|-------------------------------------|-----------------|---|
| Power Liftgate 2 | Green (alternate location) | - | Body ECU on dash fuse box, black 21 pin plug, pin 4 |
| Trunk/Hatch Release | Black (rear handle switch) | - | Driver Running Board, harness to under driver seat |
| Trunk-Hatch Release2 | Black (alternate location) | - | Certification ECU behind glove box, middle white 27 pin plug, pin 26 |
| Trunk Release Motor | Lavender/Black (w/o power liftgate) | Reverse | Dash Fuse Box, white 36 pin plug (4H), pin 20 |
| Fuel Door Release | Lavender/Blue | - | Fuel Lid Opener Switch, blue 6 pin plug, pin 5 |
| Tachometer 2 | Black (if needed) | AC | Camshaft Position Sensor, engine top driver side, black 3 pin plug, pin 1 |
| Fuel Pump | Black | + | Near Driver Firewall Grommet, white 18 pin plug (AN1), pin 1 |
| Rear Defroster | White | Reverse | Near Driver Firewall Grommet, blue 18 pin plug (AN3), pin 12 |
| Mirror Defroster | Lt. Green | Reverse | Left of Dash Fuse Box, gray 18 pin plug (AG2), pin 2 |
| Wiper Deicer | Lt. Blue | - Latched | Left of Dash Fuse Box, gray 12 pin plug (AG7), pin 6 |
| Left Front Heated Seat | Blue (w/o climate control) | Reverse | Left Seat Heater Switch, gray 6 pin plug, pin 4 |
| Right Front Heated Seat | Red (w/o climate control) | Reverse | Right Seat Heater Switch, white 6 pin plug, pin 4 |
| Left Front Heated Seat 2 | Tan (with climate control) | MUX | Driver Kick, white 18 pin plug (GN3), pin 4 |
| Right Front Heated Seat 2 | Lt. Green (with climate control) | MUX | Passenger Kick, white 18 pin plug (GM3), pin 13 |
| Heated Steering Wheel | Black | + Latched | Steering Heater Switch, blue 6 pin plug, pin 2 |

| Item | Wire Color | Polarity | Wire Location |
|---------------------------|---|-----------------|--|
| Speed Sense | Lt. Green | AC | Radio, gray 28 pin plug, pin 27 |
| Brake Wire | Lavender/White | + | Brake Switch, white 7 pin plug, pin 3 |
| Parking Brake | Pink (electric parking brake) | - | Left of Dash Fuse Box, gray 12 pin plug (AG7), pin 7 |
| Horn Trigger | Blue | - | Left of Dash Fuse Box, gray 18 pin plug (AG2), pin 17 |
| Horn Trigger 2 | White (alternate location) | - | Dash Fuse Box, white 32 pin plug (4F), pin 27 |
| Horn - Factory Alarm | Blue | - | Dash Fuse Box, rear, white 56 pin plug (4A), pin 20 |
| Wipers | Green (LO); Red (HI) | - | Headlight Switch, white 40 pin plug, pin 26 (LO); pin 27 (HI) |
| Wipers Protection | Black (ground) | Cut | Headlight Switch, white 40 pin plug, pin 33 |
| Memory Seat 1 | Gray | - | Body ECU on dash fuse box, black 27 pin plug, pin 10 |
| Memory Seat 2 | Red | - | Body ECU on dash fuse box, black 27 pin plug, pin 9 |
| Radio 12V | Lt. Green or Tan | + | Radio, gray 28 pin plug, pin 4 |
| Radio Ground | White/Black | - | Radio, gray 28 pin plug, pin 1 |
| Radio Ignition | Gray | + | Radio, gray 28 pin plug, pin 15 |
| Radio Illumination | Green (parking lights); Tan (dimmer) | +,- | Radio, white 30 pin plug, pin 15 (parking lights); pin 16 (dimmer) |
| Left Front Speaker (+/-) | Lavender/Black - Lavender/Red --or-- Black - Green | +,- | Radio, black 10 pin plug, pins 2 - 7 |
| Right Front Speaker (+/-) | Lavender/Lt. Green - Lavender/Blue --or-- White - Red | +,- | Radio, black 10 pin plug, pins 1 - 6 |
| Left Rear Speaker (+/-) | Lavender/Green - Lavender/Gray --or-- Yellow - Brown | +,- | Radio, black 10 pin plug, pins 3 - 8 |

| Item | Wire Color | Polarity | Wire Location |
|--------------------------------|---|-----------------|---|
| Right Rear Speaker (+/-) | Lavender/Red - Lavender/Green | +,- | Radio, black 10 pin plug, pins 4 - 9 |
| Left Front Speaker - With Amp | Lavender/White - Lavender/Lt. Green | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 14 - 29 |
| Right Front Speaker - With Amp | Lavender/Gray - Lavender/Blue | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 9 - 24 |
| Left Front Tweeter - With Amp | Lavender/Black - Lavender/Lt. Green | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 10 - 25 |
| Right Front Tweeter - With Amp | Lavender/Tan - Lavender/Gray | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 13 - 28 |
| Left Rear Speaker - With Amp | Lavender/Green - Lavender/Lt. Green | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 11 - 26 |
| Right Rear Speaker - With Amp | Lavender/Red - Lavender/Lt. Green | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 12 - 27 |
| Subwoofer - With Amp | Lavender/Yellow - Lavender/Blue (coil 1); Lavender/Red - Lavender/Blue (coil 2) | +,- | Amplifier in right rear quarter panel, white 30 pin plug, pins 8 - 23 (coil 1); pins 15 - 30 (coil 2) |
| Aux. Audio Input Left (+/-) | Black - Red | +,- | Radio, gray 28 pin plug, pins 11 - 13 |
| Aux. Audio Input Right (+/-) | White - Red | +,- | Radio, gray 28 pin plug, pins 12 - 13 |
| Rearview Camera Video | Black - White (rear); Violet - Lt. Blue (panoramic) | +,- | Radio, white 30 pin plug, pins 28 - 29 |