GARMIN

RV-IN1501 RV INFOTAINMENT SYSTEM INSTALLATION INSTRUCTIONS

Important Safety Information

⚠ WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

NOTICE

Failure to follow these cautions could result in damage to the vehicle or poor product performance.

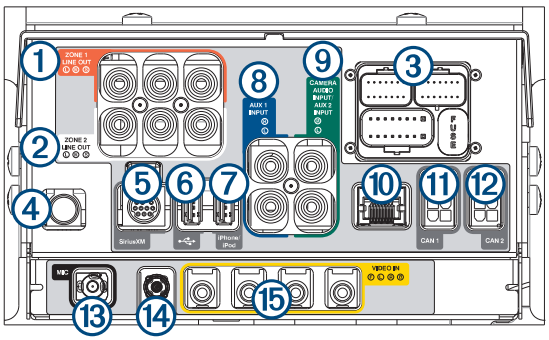
This device must be installed according to these instructions.

Disconnect the vehicle's power supply before beginning to install this product.

Before applying power to this product, make sure it has been correctly grounded according to the installation instructions.

You must read all installation instructions before beginning the installation. If you experience difficulty during the installation, contact Garmin® Product Support.

Connector Identification



Item	Label	Description	Connector Details
①	ZONE 1 LINE OUT	Line out connectors for zone 1	Left (white), right (red), and subwoofer (orange) RCA connectors
②	ZONE 2 LINE OUT	Line out connectors for zone 2	Left (white), right (red), and subwoofer (orange) RCA connectors
③	None	Wiring harness connectors	Connects to the included and optional wiring harnesses
④	None	AM/FM antenna connector	Connects to either the vehicle's AM/FM antenna cable or an inline adapter attached to the vehicle's AM/FM antenna cable
⑤	SiriusXM	SiriusXM® port	Connects to a compatible SiriusXM Connect vehicle tuner and antenna (sold separately)
⑥	⇐	USB (500 mA)	Reserved for manufacturer use Compatible only with low-current (<500 mA) USB devices
⑦	iPhone/iPod	USB (1 A)	Interfaces with and charges supported smartphones and USB devices
⑧	AUX 1 INPUT	Auxiliary input 1	Left (white) and right (red) RCA connectors
⑨	CAMERA AUDIO INPUT/AUX 2 INPUT	Input for camera audio or for auxiliary 2	Left (white) and right (red) RCA connectors
⑩	None	Ethernet port	Connects to a FUSION PartyBus™ network
⑪	CAN 1	CAN BUS 1	Connects to RV control systems using an adapter (sold separately)
⑫	CAN 2	CAN BUS 2	Reserved for vehicle integration. Connects to the chassis CAN system using an adapter cable to support steering wheel controls.
⑬	MIC	Microphone input	3.5 mm mono microphone port Connects to the included microphone for hands-free calling and voice input
⑭	None	GPS antenna	Connects to the included GPS antenna
⑮	VIDEO IN	Analog camera video input	4 RCA video connectors Connects to up to four vehicle cameras, including forward, left mirror, right mirror, and backup cameras.

Wiring Harnesses

Power and Speaker Wiring Harness

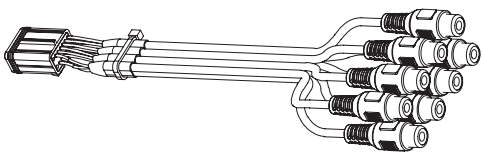
The power and speaker wiring harness contains the main power and speaker connections for the system. The harness connects directly to the stereo ① and to the vehicle wiring harness ② without modification. You can use this diagram to troubleshoot or to address non-default installation requirements.

Wire Color	Function	Notes
Yellow	Power (+)	Connects to the positive terminal of a 12 Vdc power source capable of supplying 15 A.
Red	Ignition power	Connects to a separately-switched, 12 Vdc connection, such as an ignition bus, to turn the stereo on and off.
Orange	Illumination	Connects to the vehicle's illumination wire to dim the stereo screen when the headlights are on. The gauge of the illumination wire must be suitable for the fuse supplying the circuit it is connected to. **NOTE:** This wire is not used for all vehicles.
Black	Ground (-)	Connects to the negative terminal of a 12 Vdc power source capable of supplying 15 A. You should connect this wire before connecting the yellow wire. All accessories connected to the stereo must share a common ground location.

Wire Color	Function	Notes
Blue	Amplifier on	Connects to optional external amplifiers, enabling them to turn on when the stereo turns on.
Brown	Telemute	Activates when connected to ground. For example, when you connect this wire to a compatible, hands-free mobile kit, the audio mutes or the input switches to Aux1 when a call is received and the kit connects this wire to ground. You can enable this functionality from the settings menu. **NOTE:** This wire is not used for all vehicles.
Pink	Reverse	Connects to an analog high signal, such as the reverse light, to activate the backup camera when the vehicle is placed in reverse.
Red/black	House	Connects to a 12 Vdc connection for the RV house power to turn the stereo on when the house power is turned on.
White	Speaker zone 1 left (+)	
White/ black	Speaker zone 1 left (-)	
Gray	Speaker zone 1 right (+)	
Gray/black	Speaker zone 1 right (-)	
Green	Speaker zone 2 left (+)	
Green/ black	Speaker zone 2 left (-)	
Purple	Speaker zone 2 right (+)	
Purple/ black	Speaker zone 2 right (-)	

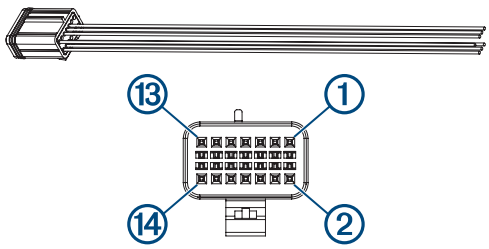
Line Out Wiring Harness

The line out wiring harness (sold separately) outputs audio to an external amplifier for zones 3 and 4.



Label	Function	RCA connectors
ZONE 3	Outputs analog audio to an external amplifier for zone 3.	Left (white), right (red), and sub (orange)
ZONE 4	Outputs analog audio to an external amplifier for zone 4.	Left (white), right (red), and sub (orange)
AUX IN 2	Not used. These connectors are not active for the RV-IN1501 product model. You must use the CAMERA AUDIO INPUT/AUX 2 INPUT connector on the back of the stereo instead.	Not used

Analog Signal Detect Wiring Harness



Wire color	Pin	Function	Notes
Green	1	Analog input 1	Connects to the steering wheel controls. Not available for all vehicles. Contact the RV manufacturer for more information.
Purple	2	Analog input 2	Connects to the steering wheel controls. Not available for all vehicles. Contact the RV manufacturer for more information.
Black	4	Analog input ground	Ground wire for analog steering wheel control inputs.
Orange	5	Right camera detect	Connects to an analog high signal, such as the right turn signal, to trigger the device to display the right side camera.
Blue	6	Left camera detect	Connects to an analog high signal, such as the left turn signal, to trigger the device to display the left side camera.
Brown	7	Front camera detect	Connects to an analog high signal to trigger the device to display the front camera.
Black	9	Camera detect ground	Ground wire for the camera detect inputs.

Connecting Vehicle and Backup Cameras

You can connect up to four analog vehicle cameras to the infotainment system for backup, left, right, and front cameras.

1. For each camera, route the camera's RCA analog video cable to the back of the stereo.

   You should clearly label each cable for reference when you are connecting them to the stereo.
2. For each camera, determine the analog high signal that should trigger the stereo to display the camera, and route a wire for that signal to the back of the stereo.

   For example, you can use a reverse signal to trigger the backup camera when the vehicle is put in reverse, or you can use turn signal to trigger a side mirror camera.
3. Connect each RCA analog video cable to the VIDEO IN connectors on the back of the stereo, as shown.

①	Front camera
②	Left camera
③	Right camera
④	Backup camera

4. Connect the analog high signal wire for the backup camera to the pink REVERSE wire of the power and speaker wiring harness (*Power and Speaker Wiring Harness*, page 1).
5. Connect the analog high signal wire for each of the other cameras to the appropriate camera detect wire of the analog signal detect harness (*Analog Signal Detect Wiring Harness*, page 2).

NOTE: If you do not want to trigger a camera automatically, you should leave that camera detect wire disconnected.

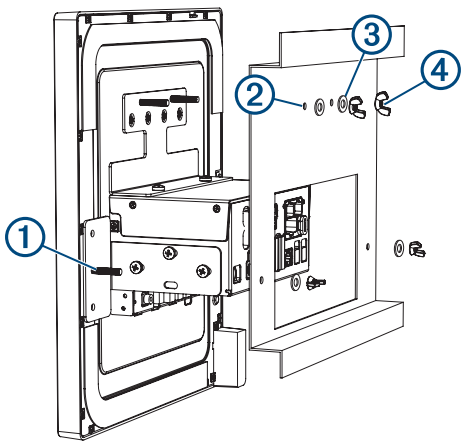
Harness wire color	Camera
Blue	Left camera
Orange	Right camera
Brown	Front camera

Installing the Infotainment System

To install the infotainment system, you need a custom metal bracket supplied by the RV manufacturer.

1. Remove the dash trim and bezel around the stereo installation location.
2. If necessary, attach the metal bracket supplied by the RV manufacturer to the dash according to the RV manufacturer specifications.
3. Connect the included wiring harnesses to the vehicle wiring harness and other A/V connectors as needed.

   You can consult the wiring diagrams to identify specific connectors and wires (*Wiring Harnesses*, page 1).
4. Route all harnesses and other wiring through the opening in the dashboard, and make all necessary wiring connections to the back of the infotainment system (*Connector Identification*, page 1).
5. Place the RV-IN1501 infotainment system into the bracket and dashboard, inserting the four threaded rods ① through the four holes ② in the bracket.



6. Place the four included washers ③ onto the threaded rods.
7. Thread the four included wingnuts ④ onto the threaded rods, and tighten them to secure the infotainment system to the bracket.
8. Install the dashboard trim and bezel around the infotainment system.

Stereo Information

Specifications

General	
Operating temperature range	From -10 to 60°C (from 14 to 140°F)
Storage temperature range	From -20 to 70°C (from -4 to 158°F)
Input voltage	From 10.8 to 16 Vdc
Current (max.)	15 A
Current (muted)	Less than 1 A
Current (standby mode)	Less than 5 mA
Fuse	15 A mini blade-type
Bluetooth® wireless range	Up to 10 m (30 ft.)

General	
ANT® wireless range	Up to 3 m (10 ft.)
Wireless frequencies/ protocols	Wi-Fi® 2.4 GHz @ +15 dBm nominal Bluetooth 2.4 GHz @ +10 dBm nominal ANT 2.4 GHz @ +4 dBm nominal

On-board, Class D Amplifier	
Output music power per channel	4 x 70 W max. 2 ohm
Total output peak power	280 W max.
Output power per channel	4 x 43 W RMS at 14.4 Vdc input, 2 ohm, 10% THD* 4 x 26 W RMS at 14.4 Vdc input, 4 ohm, 10% THD*
Line output level (max.)	5.5 V (peak to peak)
Aux input level (typical)	1 V RMS

*The stereo may limit the output power to prevent the amplifier from overheating, and to maintain the audio dynamics.

Tuner	Europe and Australasia	USA	Japan
FM radio frequency range	87.5 to 108 MHz	87.5 to 107.9 MHz	76 to 95 MHz
FM frequency step	50 kHz	200 kHz	50 kHz
AM radio frequency range	522 to 1620 kHz	530 to 1710 kHz	522 to 1620 kHz
AM frequency step	9 kHz	10 kHz	9 kHz