

# Owner's Reference

Owner's Reference LANRover USB Transporter

## Instructions for use



LANRover USB Transporter™



## Introduction

Owner's Reference LANRover USB Transporter

Read these instructions Heed all warnings Follow all instructions





WARNING. TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

Clean only with a dry cloth.

Do not place flammable material on top of or beneath the component.

All PS Audio components require adequate ventilation at all times during operation. Rack mounting is acceptable where appropriate.

Do not remove or bypass the ground pin on the end of the AC cord unless absolutely necessary to reduce hum from ground loops of connected equipment. This may cause RFI (radio frequency interference) to be induced into your playback setup. All PS products ship with a grounding type plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug this apparatus during lightning storms or when unused for long periods of time.

When making connections to this or any other component, make sure all components are off. Turn off all systems' power before connecting the PS Audio component to any other component. Make sure all cable terminations are of the highest quality.

There are no user serviceable fuses inside this product.

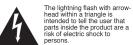
THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY PS AUDIO PRODUCT. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL

Please contact your authorized dealer, distributor, or PS Audio if you have any questions not addressed in this reference manual.

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## Introduction

Owner's Reference LANRover USB Transporter

The PS Audio LANRover USB Transporter (LANRover) is a unique two-piece solution to the problems of delivering bit perfect audio through USB. Placed between a computer's USB output and a Digital to Audio Converter (DAC) input, the LANRover can dramatically improve the audio performance of connected equipment.

In addition to the sonic improvements, the LANRover can extend the range of the USB signal from a maximum of 5 meters, to 100 meters, using your home's local area network (LAN) or a dedicated length of Ethernet Cable (CAT 5e/6/7). This permits the computer that serves your music to be placed in one room of the home, while the DAC is in another. The two are then connected through the home's router or with the dedicated CAT 5 cable without any sonic degradation.

The LANRover incorporates advanced isolation technology with the following features:

- 100m of extension when directly connected over CAT 5e/6/7 (can also operate over WIFI)
- USB extension over a Gigabit Ethernet Local Area Network (LAN)
- Support for new USB 3.0 host controllers and devices (up to 480 Mbps)
- Support for format types from your computer, PCM or DSD, up to 192kHz 24 bits.

Of course there are commercially available low cost USB extenders that work for USB devices such as keyboards and computer peripherals such as a printer. These extenders work on very different principals than the LANRover. Low cost USB extenders do not work well for audio and do not travel across a home network. Instead they rely on a re-driver mechanism that retunes the extension cable to 're-amplify' the USB signal, similar to what happens in a USB hub. Worse, these low cost extenders do not manage the timing specifications required by the USB Implementer's Forum (USB-IF) to ensure that a reliable extended connection is maintained between the USB device (the DAC) and USB host (the computer), making it impossible to reliably extend an isochronous data transmission, required for bit perfect audio to travel any distance.

The LANRover operates in an entirely different manner, unique among high end audio devices. Instead of attempting to simply re-amplify the USB data over a long cable, or regenerating it through a USB hub, the LANRover delivers USB data to/from the USB host and USB device asynchronously – all USB data is re-timed and rebuilt at the LANRover Receiver.

Aside from the obvious benefits of transporting USB musical signals over the home network, or lengths up to 100 meters over an Ethernet cable, the LANRover's ability to significantly improve the sonics of USB enabled DACs is perhaps its strongest feature.

USB communication is a noisy two-way transmission between the computer and the DAC-one that is sensitive to the cable and its environment. High performance DAC manufacturers spend thousands of man hours reducing jitter, noise, and radiated interference to the best of their abilities. They haven't much control over what happens once your DAC is connected to external sources, like a computer.

Computers are very noisy environments, rarely built with audio in mind. Instead, these general purpose computing devices serve

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a number of varied functions unrelated to delivering a bit perfect audio stream to a high-end DAC. Still, computers are often employed to deliver music stored on their hard drives or streamed over the internet.

Once tethered to a noise sensitive DAC, their USB signals must be decoupled from the noise and higher levels of jitter than most DACs can tolerate without sonic degradation. The LANRover solves this problem in a unique way.

USB data sent to the LANRover is first converted to a packetized version of the original signal. Individual blocks of bit perfect data are separated from the USB stream and an identifier is added that allows each of these packets to remain individual. Contained within that identifier is information that tells the packet its final destination, allowing it to be completely independent from the other data packets. This independence is critical when sending data over a network–data that often can take different routes depending on traffic patterns and requirements.

Once the USB data has been packetized it is now possible to galvanically isolate the computer from the DAC. Galvanic isolation refers to complete electrical isolation. No direct physical connection exists. Rather, the packets now have no attached noise from the computer and all timing data has been stripped away. Without timing data, jitter from the computer is not passed along to the DAC. The newly packetized music signal is now electrically isolated, as well as jitter free, from either the computer and the DAC.

In the same way you can download a music file over the internet without any loss of fidelity, or worry over jitter or signal shape, the LANRover has successfully (and completely) decoupled the USB signal from the computer. Once decoupled, the music can now be transferred over the home network with impunity, never degrading the signal, even over extremely long distances.

On the DAC side of the network sits the LANRover Receiver, which is also galvanically isolated from the home network. Here, the packets are reassembled into their proper order and delivered through the USB input to the DAC without added noise or jitter from the computer, the LANRover, or the network itself.

Regardless of intent, the LANRover delivers near perfect performance over USB to your DAC. The sound quality improvements are uniformly excellent, regardless of the length of cable connecting the LANRover Sender or Receiver. Use the included 1 meter-long CAT5 Ethernet cable between the LANRover's two boxes and enjoy the immediate increase in soundstage width, depth, PRaT, and removal of a layer of sonic haze you may not have known existed. Or, separate the same two LANRover boxes by many meters, with the computer on one side of your home feeding the listening room on the other, and revel in the identical level of improvement.

Length of run, or transmission method, does not affect sound. If you do not have your home wired for a home network, you can use a high speed wireless Ethernet Bridge and achieve identical sonic results, separating the computer from the DAC.

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The LANRover comes complete with two units: a Sender and a Receiver, plus a universal voltage power supply as well as two courtesy connecting cables.

Positioning of the Sender and Receiver enclosures is typically not critical as long as common sense precautions are taken, such as keeping them away from excessive heat or vibration.

Care should be taken to keep the two USB cables (one on the Sender side, the second on the Receiver side) as short as practical. We recommend users do not exceed 3 meters, and 1 meter is preferable.

The supplied USB cable is specific to the Sender side, connecting the computer to the LANRover' Sender. Here, the quality of the USB cable is less important than on the receiver side of the LANRover network.

The LANRover Receiver connects to the DAC via a USB cable. Here, the quality of the USB cable plays a significant role in achieving excellent musical results. We recommend paying particular attention to the quality of the USB cable connection the LANRover Receiver to the DAC.

The supplied +5V power supply is a universal input voltage DC supply. It was chosen to supply sufficient power to the LANRover Receiver and maintain our high standards of sonic and musical accuracy. It is possible to use an aftermarket +5V linear power supply if you wish, and certainly some users will.

The LANRover requires no additional drivers from your computer. The easiest way to ensure the LANRover connects seamlessly to your DAC is to follow these instructions if possible:

- Connect your computer to your DAC via a USB cable of not more than 3 meters in length.
- Ensure the drivers required for your DAC have been installed on your computer (if Windows)
- Verify the DAC and computer work together and play music
- Disconnect the USB cable and proceed with the rest of these instructions

If the DAC and computer are to be separated by more than 3 meters, or over the network, do your best to make sure your Windows computer has the appropriate DAC driver installed. If operating from a MAC, no extra drivers need be installed.

PS Audio products come from the factory with a 3-year warranty. Please register your new LANRover. Registration takes just a few minutes, helps us inform you about future upgrades, keeps track of your serial number and allows us to maintain the highest standards of product quality of any company.

To register your new unit, look on the the bottom of the LANRover and note the serial number. Using any web browser, go to www.psaudio.com and click on Register Products.

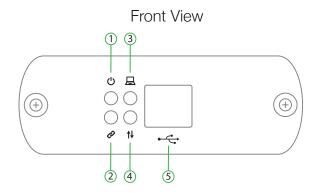
Once you have completed the registration process you can then go to the PS website and look at the My Registered Products page. The link to this page is located at the top right hand corner of the website once you are logged in. If you do not have web access you may register the unit via mail or phone. Notification of upgrades to this product will be available only to registered owners via the web and email. Full warranty information is included in this manual at the end.

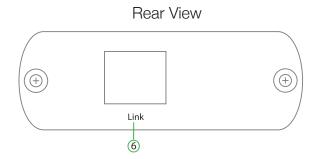


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### The LANRover Sender

The LANRover Sender unit connects to the computer using a standard USB 2.0 cable. Power for this unit is provided by the host computer.





#### **Indicator lights**

There are 4 indicator lights on the front of the LANRover Sender unit.

- 1. Power LED. This green LED lights when power is supplied to the Sender via the USB cable.
- 2. Link LED. Indicates a valid link is established between the local Sender and remote Receiver.
  - LED turns on when link between the local Sender and remote Receiver is established.
  - LED is off when there is no link between local Sender and remote Receiver.
  - LED is slow blinking when the Sender is attempting to establish a link.
  - LED is fast blinking to indicate the unit is properly paired with the Receiver.
- **3. Host LED.** Indicates that the LANRover system is properly enumerated on the host computer. The LED blinks when the LANRover is in a suspended state.
- 4. Activity LED. Indicates data transmission is occurring between Sender and Receiver. LED blinks intermittently with or without a USB device connected. When the Sender and Receiver are in suspend mode, the LED is off.
- **5. USB Host port.** Used to connect the LANRover Sender to your computer. Accepts Type B connector. The quality of the USB cable in this port is not as important as the one on the output of the LANRover Receiver.
- 6. Link Port. Accepts RJ45 connector for CAT 5e/6/7 cabling. This Ethernet cable can be connected directly to the LANRover

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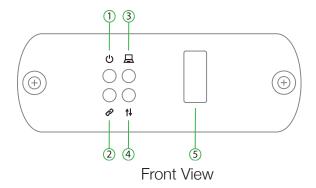
Receiver, and can be as long as 100 meters, or it can connect to your home router. Once connected to the home router, there are no distance restrictions between the LANRover Sender and the LANRover Receiver.

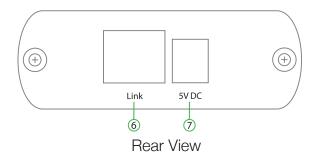


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### The LANRover Receiver

The LANRover Receiver unit provides one USB Type A port for connection to your DAC. Additional DACS may be connected by attaching up to four USB hubs to the LANRover Receiver unit if so desired (though not recommended for best sound. The LANRover Receiver is powered by an external AC adapter, supplying up to 1 Amp to the USB port. The external AC supply is included with the LANRover.





- 1. Power LED. This green LED lights when power is supplied to the Receiver via the external AC power supply.
- 2. Link LED. Indicates a valid link is established between the local Sender and remote Receiver.
  - LED turns on when link between the local Sender and remote Receiver is established.
  - LED is off when there is no link between local Sender and remote Receiver.
  - LED is slow blinking when the Sender is attempting to establish a link with the Receiver.
  - LED is fast blinking to indicate the unit is properly paired with the Sender.
- **3. Host LED**. Indicates that the LANRover system is properly enumerated on the host computer. The LED blinks when the LANRover is in a suspended state.
- **4. Activity LED**. Indicates data transmission is occurring between Sender and Receiver. LED blinks intermittently with or without a USB device connected. When the Sender and Receiver are in suspend mode, the LED is off.
- **5. USB Device port.** Used to connect the LANRover Receiver to your DAC. Accepts Type A connector. The quality of the USB cable in this port is critical and we recommend using the finest available.
- 6. Link Port. Accepts RJ45 connector for CAT 5e/6/7 cabling. This Ethernet cable can be connected directly to the LANRover

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Sender, and can be as long as 100 meters, or it can connect to your home router. Once connected to the home router, there are no distance restrictions between the LANRover Sender and the LANRover Receiver.

7. Power Port. Connects to the AC power supply. This input accepts +5V DC from the included AC power adapter. It is possible to use another after-market AC/DC converter if you wish. Requirements are +5V DC at >1 amp. After market +5V DC supplies are available and some will wish to upgrade.



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### **Installing the LANRover on a wired Local Area Network**

#### Requirements

To complete the installation, you will also require the following items that are not included with this system:

- USB compatible computer (host computer)
- Home Gigabit speed Router
- CAT 5e/6/7 wired Ethernet cabling
- Pre-configured Local Area Network



The above diagram shows the setup of a wired home network. The CAT 5e/6/7 connecting cables between the router and the LANRover Reciever can be up to 100 meters from the router. Typical home CAT 5e/6/7 Ethernet wiring is fine. Network switches, as long as they are Gigabit switches, are fine as well.

Most home networks are ready to accept the LANRover without further modifications. There are limitations, however. Home networks work best when they are Gigabit speed. 100mB or lower can work but will likely be problematic. USB 2.0 is capable of consuming up to 480 Mbps.

For trouble free performance without any dropouts, we recommend a Gigabit router be installed. Gigabit routers are inexpensive and readily available. Check the brand and model of your home router and upgrade if necessary. The performance of the LANRover over a home network will be limited to the slowest link between the LANRover Sender and Receiver.

#### Installing the LANRover Sender over a home network

- 1. Place the LANRover as close to the computer as possible.
- 2. Connect the supplied USB cable between the LANRover Sender host port and a USB port on the
- 3. computer.
- 4. Connect a CAT 5e/6/7 patch cable (not provided) between the LANRover Sender and the home's router or switch. Maximum length of this CAT 5e/6/7 connection should not exceed 100 meters.

### Installing the LANRover Receiver over a home network

- 1. Place the LANRover Receiver as close to the DAC as possible.
- 2. Assemble the power adapter and country specific power cord together and connect them into a suitable AC outlet.

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- 3. Connect the power adapter to the power inlet on the LANRover Receiver.
- 4. Connect a CAT 5e/6/7 from the router into the Ethernet port of the LANRover Reciever.
- 5. Connect the USB output of the LANRover Receiver to the USB input of your DAC. It is critical to use the highest quality USB cable for this purpose.

The DAC should now see the driver for your DAC that has been installed on your computer as if the computer were sitting next to the DAC, connected via USB as normal.

You may need to reboot the DAC for the driver to be recognized.

You should immediately notice a significant improvement in sound quality.



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### **Installing the LANRover on a wireless Local Area Network**

#### Requirements

To complete the installation, you will also require the following items that are not included with this system:

- USB compatible computer (host computer)
- Home Gigabit speed Router
- Gigabit Ethernet Bridge (Access Point)



The above diagram shows the setup of a wireless home network. It is always preferable to use a wired home network if possible. The Gigabit router connects to LANRover Sender via a CAT 5 cable, which can be as long as 100 meters. The Gigabit router then connects via WIFI to the Gigabit WIFI Ethernet Bridge. The maximum distance between the router and the Ethernet Bridge is determined by many factors and varies with every home. If your DAC is too far away from the router's WIFI signal for the Ethernet Bridge to connect, this method may not be right for you.

Home networks work best when they are Gigabit speed. 100mB or lower routers and Ethernet Bridge units can work but will likely be problematic. USB 2.0 is capable of consuming up to 480 Mbps.

For trouble free performance without any dropouts, we recommend a Gigabit router and Ethernet Bridge be installed. Gigabit routers and Ethernet Bridges are inexpensive and readily available. The performance of the LANRover over a home WIFI network will be limited to the slowest link between the LANRover Sender and Receiver.

#### Installing the LANRover Sender over a home WIFI network

- 1. Place the LANRover as close to the computer as possible.
- 2. Connect the supplied USB cable between the LANRover Sender host port and a USB port on the
- 3. computer.
- 4. Connect a CAT 5e/6/7 patch cable (not provided) between the LANRover Sender and the home's router or switch. Maximum length of this CAT 5e/6/7 connection should not exceed 100 meters.
- 5. Install a Gigabit WIFI Ethernet Bridge and, using the WPS buttons on modern units, connect the Ethernet Bridge to the router, making sure the two devices talk to each other over WIFI. It is possible to rely upon a Gigabit WIFI Extender if necessary but this is not recommended.

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#### Installing the LANRover Receiver over a home WIFI network

- 1. Place the LANRover Receiver as close to the DAC as possible.
- 2. Assemble the power adapter and country specific power cord together and connect them into a suitable AC outlet.
- 3. Connect the power adapter to the power inlet on the LANRover Receiver.
- 4. Connect a CAT 5e/6/7 from the Ethernet Bridge into the Ethernet port of the LANRover Reciever.
- 5. Connect the USB output of the LANRover Receiver to the USB input of your DAC. It is critical to use the highest quality USB cable for this purpose.

The DAC should now see the driver for your DAC that has been installed on your computer as if the computer were sitting next to the DAC, connected via USB as normal.

You may need to reboot the DAC for the driver to be recognized.

You should immediately notice a significant improvement in sound quality.



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### **Installing the LANRover with a Direct Connection**



The above diagram shows the setup of a Direct Connect for the LANRover. The CAT 5e/6/7 connecting cables between the LANRover Sender and Receiver can be up to 100 meters in length. This will permit the computer to be that far away from the DAC.

Most Direct Connect applications will be less than 100 meters and the LANRover will be used strictly as an isolation device to dramatically improve the performance and sound quality of the DAC and connected computer. If the Direct Connect method is used for sonic improvement specifically, then we recommend using the supplied 1 meter CAT 5 cable between the LANRover Sender and LANRover Receiver.

#### **Installing the LANRover Sender with Direct Connect**

- 1. Place the LANRover as close to the computer as possible.
- 2. Connect the supplied USB cable between the LANRover Sender host port and a USB port on the computer.
- 3. Connect a CAT 5e/6/7 patch cable between the LANRover Sender and the LANRover Receiver.

#### Installing the LANRover Receiver with Direct Connect

- 1. Place the LANRover Receiver as close to the DAC as possible.
- 2. Assemble the power adapter and country specific power cord together and connect them into a suitable AC outlet.
- 3. Connect the power adapter to the power inlet on the LANRover Receiver.
- 4. Connect a CAT 5e/6/7 from the LANRover Sender into the Ethernet port of the LANRover Reciever.
- 5. Connect the USB output of the LANRover Receiver to the USB input of your DAC. It is critical to use the highest quality USB cable for this purpose.

The DAC should now see the driver for your DAC that has been installed on your computer as if the computer were sitting next to the DAC, connected via USB as normal.

You may need to reboot the DAC for the driver to be recognized.

You should immediately notice a significant improvement in sound quality.

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### **Checking the Installation**

The LANRover typically gets hooked up and just works. Yes, it's that simple. However, there are always times when you want to make sure everything's working properly.

On the LANRover Sender and Receiver, check that the Power, Activity, Link and Host LEDs are on.

For Direct Connect, if the Host or Link LEDs are permanently off, then the cabling between the LANRover Sender and Receiver may not be installed properly or is defective.

For Network Connect, if the Link LED is blinking, then the network connection between the LANRover Sender and Receiver is not complete and there may be faulty cabling, network components, misconfigured network components, or the LANRover Sender and Receiver may need to be re-paired together (see the section on pairing). The LANRovers are paired together at the factory and should not require re-pairing.

### **Pairing the LANRover**

The LANRovers are sold in pairs and are paired together at the factory. Generally, no pairing action should be required once purchased. However, if you simply wish to change the LANRover Sender and Receiver pairings across a network, or using the Direct Connect method, then the following steps must be taken:

- 1. Ensure the LANRover Sender and Receiver are either directly connected to each other, or are connected over your home network.
- 2. Press and hold the Mode button on the bottom of the LANRover Sender. Release the button within 10 seconds. The Link LED will start flashing. Pairing mode has been activated on the LANRover Sender.
- 3. Within 10 minutes of activating the pairing mode on the LANRover Sender, press and hold the Mode button on the bottom of the LANRover Receiver. Release the button within 10 seconds. The Link LED will start flashing. Pairing mode has been activated on the LANRover pair.
- 4. The Link LED on both units may start flashing more slowly before finally turning on. Once the Link LEDs are solid, the link is established between both Sender and Receiver.
- 5. If more than 10 minutes passes before the units are paired, then the LANRovers will switch back to regular mode and reestablish the previous links they had, if any.
- 6. To cancel pairing mode, press and hold the 'Mode' button a second time. Release it within 10 seconds.

### **Unpairing the LANRover**

If for any reason LANRover needs to have its pairing removed, this can be done by pressing and holding the Mode button for longer than 10 seconds. Once this is completed the unit will not be paired to any other LANRover.

### **Compatibility**

The LANRover complies with USB 1.1 and USB 2.0 specifications governing the design of USB devices. However, there is no guarantee that all USB devices or hosts will be compatible with the LANRover, as there are a number of different characteristics that may impact the operation of USB devices over extended distances.

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# Troubleshooting

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### **Troubleshooting**

The following table provides troubleshooting tips. The topics are arranged in the order in which they should be executed in most situations. If you are unable to resolve the problem after following these instructions, please contact PS Audio's support team at support@psaudio.com or by phone 720.406.8946.

Typically, LANRovers just connect without a problem. If they work at first then later cease communicating, reboot both the Sender and the Receiver. The Sender can be rebooted by removing the USB cable. The Receiver can be rebooted by removing power from its AC adapter, then reapplying power again. It's often helpful to also reboot your DAC.

PROBLEM	CAUSE	SOLUTION
All LEDs on the LANRover Sender are off.	The LANRover Sender is not receiving power from the USB port.	<ol> <li>Ensure that the host computer is connected to the Sender.</li> <li>Move the USB connector to another USB port on the host computer.</li> </ol>
All LEDs on the LANRover Receiver.	The LANRover Receiver is not receiving power from the AC adapter.	<ol> <li>Ensure that the AC power adapter is properly connected to the LANRover Transmitter.</li> <li>Check that the AC adapter is connected to a live source of electrical power. Check that the LANRover Receiver's power LED is illuminated.</li> </ol>
Link LEDs on the two units are off.	There is no connection be- tween the Sender and Re- ceiver.	<ol> <li>Ensure CAT 5e/6/7 cable is connected between the Sender and Receiver units; cable should be a straight through connector with no crossovers.</li> <li>Connect a short CAT 5e/6/7 patch cord between the Sender and Receiver to determine if the original CAT 5e/6/7 cable is defective.</li> </ol>



# Troubleshooting

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PROBLEM	CAUSE	SOLUTION
Link LEDs are blinking.	<ul> <li>There is no connection between the Sender and Receiver.</li> <li>Units may not be paired to each other.</li> <li>Network switches exist on different subnets.</li> <li>Network switch(es) are blocking traffic between the two units.</li> </ul>	<ol> <li>Ensure both the Sender and Receiver are connected together directly or are connected to the router.</li> <li>Re-pair the units together.</li> <li>Ensure the network can communicate with other devices and all are on the same subnet.</li> <li>Ensure the network router is not blocking traffic from the LANRovers either based on MAC address or due to traffic patterns.</li> </ol>





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### **Limited Three Year Warranty**

Should I Register My Product?

- Registering your product validates the warranty start date.
- If you do not register your product within 30 days of service, a copy of your purchase receipt from an authorized PS Audio dealer may be used as a proof of purchase to establish the warranty start date.
- If no proof of purchase from an authorized PS Audio dealer or registration is provided, the production date of the product will be used to determine the warranty start date.
- Registration can be completed online, by phone, by mail, or by email.
- You may wish to sign up for PS Audio's monthly newsletters, specials, product updates, and/or Paul's Daily Posts.

What Does this Warranty Cover?

This warranty covers defects in material and workmanship for products purchased from PS Audio or its authorized dealers and agents.

What Will PS Audio Do to Correct the Problem?

In the event your product fails your sole remedy under this limited warranty shall be to return the product to PS Audio or an authorized PS Audio repair center. The product will be repaired without charge for parts or labor, replaced, or the purchase price refunded through the original point of purchase, at the option of PS Audio.

What is the Period of Coverage?

This limited warranty is in effect for 3 years from the date the unit was first purchased from PS Audio or its dealers and agents.

Who Pays for Shipping?

You are responsible to pay for the safe and proper shipment of the warrantied product to PS Audio or its authorized repair center.

PS Audio or it's authorized repair center will pay the cost of returning the repaired or replacement product to you under this warranty.

What Does this Warranty Not Cover?

- This warranty does not cover damage due to: Accidents, carelessness, improper transportation, misuse, neglect, or abuse
- Failure to follow the operating instructions that are provided by PS Audio in the owner's manuals (available for download at psaudio.com)
- Use in any manner inconsistent with PS Audio's operating instructions (available for download at psaudio.com)
- Lack of routine maintenance
- Connection to an improper voltage supply
- Alterations or modifications to the unit





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- Improper or unauthorized repair, including repairs not authorized by PS Audio or a PS Audio authorized repair center
- Fire, lightning, flood, "acts of God," or other contingencies beyond the control of PS Audio
- Products purchased through an unauthorized source (if you have questions as to whether or not a dealer is authorized, please contact customer support at psaudio.com)
- · Products with a factory-applied serial number that has in any way been altered, defaced, or removed

#### Limitations on PS Audio's Obligations Under this Warranty

- In no event will PS Audio's liability to you exceed the original purchase price of the unit.
- This warranty does not cover the cost of custom installation, customer instruction, setup adjustments, or signal reception problems.
- This warranty does not cover consequential and incidental damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- In the event your warrantied product cannot be repaired, PS Audio will replace or refund the unit. We reserve the right to replace any out-of-stock, discontinued, or limited edition products with a comparable product. Discontinued products may not be available for warranty replacement.

#### How Can the Warranty be Transferred?

This warranty is for the benefit of the original purchaser of the product. The warranty may be transferred to a subsequent purchaser during the 3 year warranty period. To do this, you must contact PS Audio directly to set up transfer of registration.

#### How Do I Get Warranty Service?

To locate an authorized PS Audio repair center, for service assistance, or for help with the operation of a product or just for information, please contact PS Audio customer support.

#### Warranty Service Within the US

- You must first obtain a Return Merchandise Authorization Number (RMA#) to receive warranty service and prior to returning any item. Contact PS Audio or an authorized PS Audio repair center to receive an RMA#.
- You must put the RMA# on all returns. If it is not clearly marked, PS Audio will return the package back to you, freight collect.
- You should include a description of the problem, along with the RMA# inside the packaging.
- Original packaging should be used for the safe transit of your PS Audio unit to the repair center. If you do not have the original packing, PS Audio can sell and ship to you replacement packaging.
- You are responsible for the cost of shipping the product to a PS Audio authorized repair center. You should insure the product for its full retail cost in the event it gets lost or damaged in transit. PS Audio is not responsible for damage incurred in products sent to us.
- Shipping your product in non-PS Audio packaging may void this warranty. PS Audio reserves the right to charge you for new factory packaging to return your product after a repair.

How State Law Applies





Owner's Reference LANRover USB Transporter

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty Service Outside of the US

PS Audio has authorized distribution in many countries of the world. In each country, the authorized importing distributor has accepted the responsibility for warranty of products sold by that distributor. Warranty service should be obtained where the product was purchased.

### Changes to Our Products

PS Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any products without notice or obligation to any person.

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