VXi-HUB

JLid-COMM & OPTICAL AUDIO NETWORK HUB



with JLid™

CONNECTION GUIDE

Planning Your Installation
It is important that you take the time to read this manual thoroughly and that you plan your installation carefully. It is very easy to damage expensive vehicle systems in modern automobiles. Never assume that you have found appropriate wires without consulting a reliable wiring diagram or without analyzing with proper test equipment. If you are uncomfortable or unfamiliar with reading diagrams or testing methods, please enlist the services of your authorized JL Audio dealer to perform the installation. Your authorized dealer has the training, expertise and installation equipment to ensure optimum performance from this product.

What is Included
(1) VXI-HUB
(1) Connection Guide

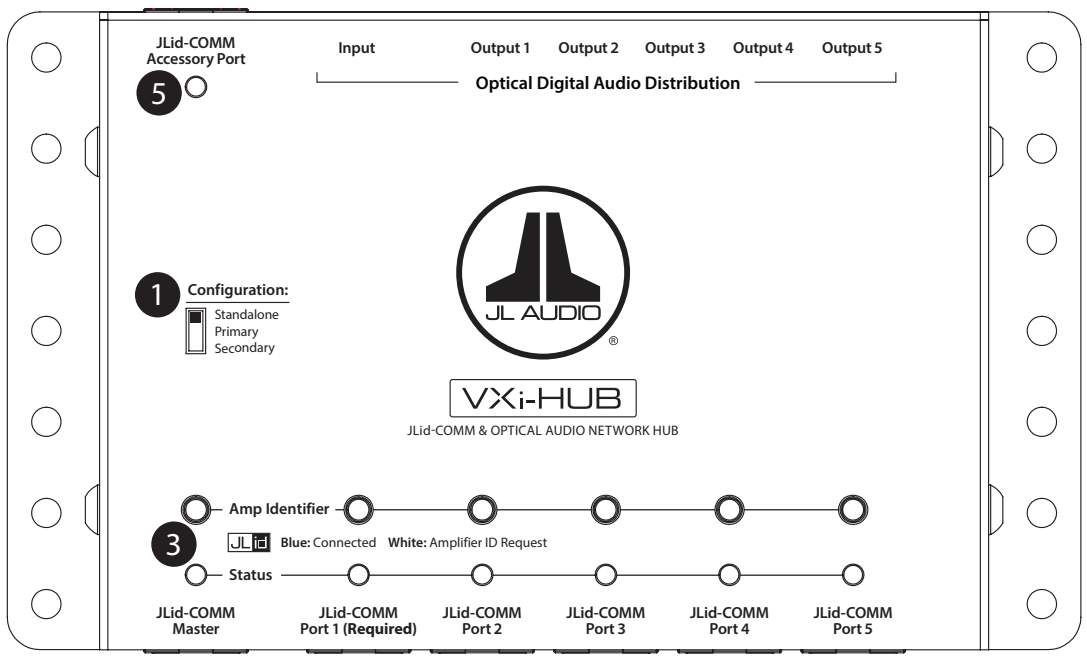
Product Description
The VXI-HUB is an accessory designed to provide network connectivity of VXi amplifiers in a multi-amp system. Networking greatly simplifies the configuration process by permitting the setup and tuning of all amplifiers using a single TüN™ project file. Additionally, networking synchronizes DSP presets of all amplifiers and propagates DRC commands across the entire amplifier network, using a single DRC controller.

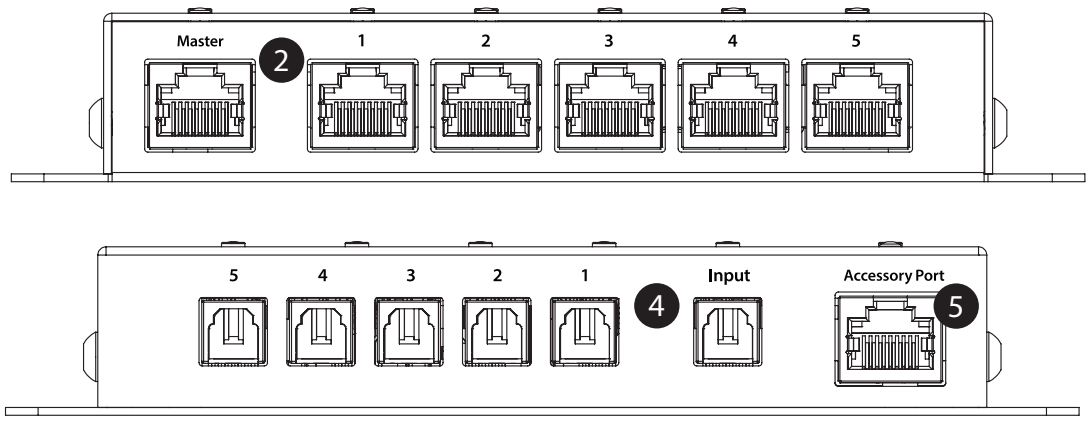
The VXi-HUB includes JLid-COMM connections to network six VXi amplifiers (one Master amplifier and five Slave amplifiers). Up to two VXI-HUBs can be daisy-chained allowing network connectivity for up to ten VXi amplifiers. All energy to power the VXi-HUB is derived from the connected VXi amplifiers.

For systems utilizing a optical digital signal source, a built-in S/PDIF digital repeater is also onboard to distribute optical digital audio signals to networked amplifiers (one S/PDIF digital input and five S/PDIF digital outputs).The digital audio outputs remain synchronized to avoid the timing and phase issues that can occur with daisy-chain style connections. Optical digital audio connections are capable of handling S/PDIF signals up to 24 bit/192 kHz.

A dedicated JLid-COMM accessory port is included for the connection of the optional VXi-BTC Bluetooth® Communicator (sold separately). The VXi-BTC permits the wireless configuration of an amplifier network using a compatible iOS® or Android® device running TüN™ Mobile or TüN™ Express apps.

Note: The VXi-HUB utilizes a proprietary JLid™ communication protocol via standard CAT5e network cables (not included). Use only CAT5e type network cables and keep cable lengths as short as possible for optimum performance. Audio signals are NOT transmitted via JLid-COMM connections.





1 Configuration Switch

Use the Configuration switch to set the VXi-HUB's functionality. A single VXi-HUB can network a total of six VXi amplifiers, consisting of one Master amplifier and up to five Slave amplifiers. A second VXi-HUB can be daisy-chained to network ten VXi amplifiers, comprising of one Master amplifier and up to nine Slave amplifiers. A maximum of two VXi-HUBs may be used in a single network. Refer to the table below for a description of each switch setting and select according to your specific system.

Setting	Function / Description
Standalone	Select for Single-HUB systems
Primary	Select for the first VXi-HUB in Two-HUB systems
Secondary	Select for the second VXi-HUB in Two-HUB systems

2 JLid-COMM Amplifier Port Connections

The VXi-HUB is equipped with one Master and five numbered JLid-COMM ports to connect to the JLid-COMM port on VXi amplifiers. JLid-COMM connections are made using standard CAT5e network cables (not included). For optimum performance, use only CAT5e type network cables and keep cable lengths as short as possible. Refer to the tables below for detailed connection info for your specific system.

Single-HUB System:

JLid-COMM Ports on VXi-HUB	Connection	Note
JLid-COMM Master Port	JLid-COMM Port of the Master VXi Amplifier	
JLid-COMM Ports 1 to 5	JLid-COMM Port of Slave VXi Amplifiers	If using the VXi-HUB's built-in Optical Digital Audio Distribution, a Slave VXi amplifier connection to Port 1 is required.

Two-HUB System:

	JLid-COMM Ports on VXi-HUB	Connection	Note
Primary HUB	JLid-COMM Master Port	JLid-COMM Port of the Master VXi Amplifier	
	JLid-COMM Ports 1 to 4	JLid-COMM Port of Slave VXi Amplifiers	If using this VXi-HUB's built-in Optical Digital Audio Distribution, a Slave VXi amplifier connection to Port 1 is required.
	JLid-COMM Port 5	JLid-COMM Master Port of the Secondary VXi-HUB	
Secondary HUB	JLid-COMM Master Port	JLid-COMM Port 5 of the Primary VXi-HUB	
	JLid-COMM Ports 1 to 5	JLid-COMM Port of Slave VXi Amplifiers	If using this VXi-HUB's built-in Optical Digital Audio Distribution, a Slave VXi amplifier connection to Port 1 is required.

3 Amp Identifier and Status LEDs

Each JLid-COMM amplifier port is equipped with a status LED that will illuminate solid blue when connected to a VXi amplifier. Pressing an Amp Identifier button on the VXi-HUB will change its status LED to white and cause the LED badge on the connected VXi amplifier to flash white. This functionality may be useful to identify specific amplifiers, after installation.

4 Optical Digital Audio Distribution

The VXi-HUB is equipped with a built-in S/PDIF digital repeater to distribute a single optical (Toslink) input signal to five optical (Toslink) outputs, at up to 24 bit/192 kHz. Digital audio outputs retain absolute synchronization to avoid timing and phase irregularities that can occur with daisy-chain style connections. **Note: The five digital audio outputs are unaltered replicas of the digital input, with no processing applied. Optical Digital Audio Distribution functionality requires a Slave amplifier connection to JLid-COMM Port 1.**

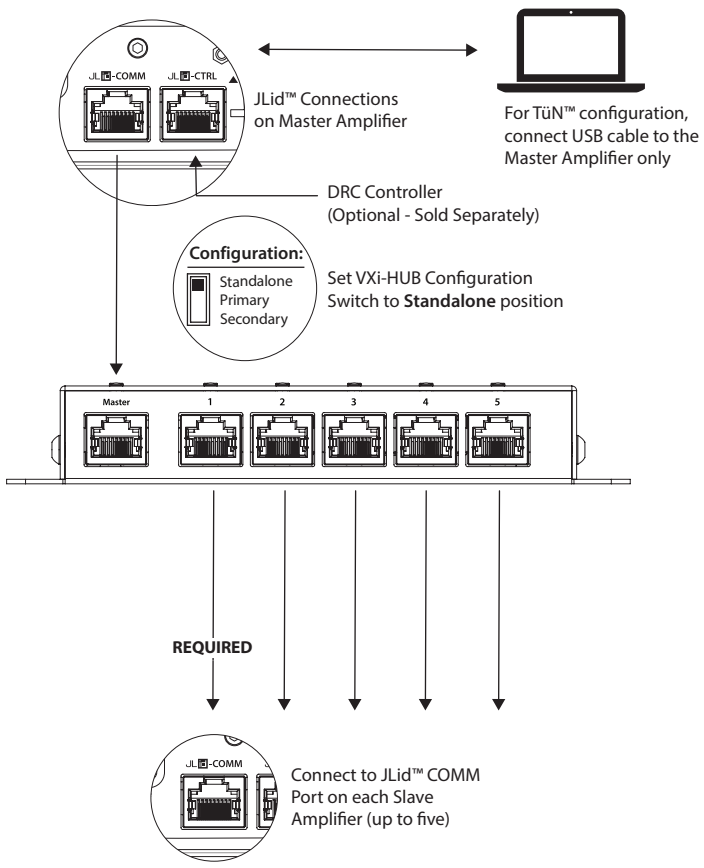
5 JLid-COMM Accessory Port and LED

The JLid-COMM Accessory Port is used to connect an optional VXi-BTC Bluetooth® Communicator (sold separately) to deliver wireless setup and tuning control of VXi amplifiers, using a compatible handheld device running TüN™ Mobile and TüN™ Express applications. **Note: The VXi-BTC provides a control interface only and does NOT support audio streaming.**

This connection is made using a standard CAT5e cable (included with the VXi-BTC Bluetooth® Communicator). When a VXi-BTC is connected, the JLid-COMM Accessory Port LED will illuminate blue to indicate a valid connection. An amber LED indicates an incompatible connection. **Note: JLid-COMM Accessory Port functionality requires an amplifier connection to the JLid-COMM Master Port. When used in Two-HUB System applications, the VXi-BTC should be connected to the Primary VXi-HUB only.**

JLid™ Network Connections for a single VXi-HUB

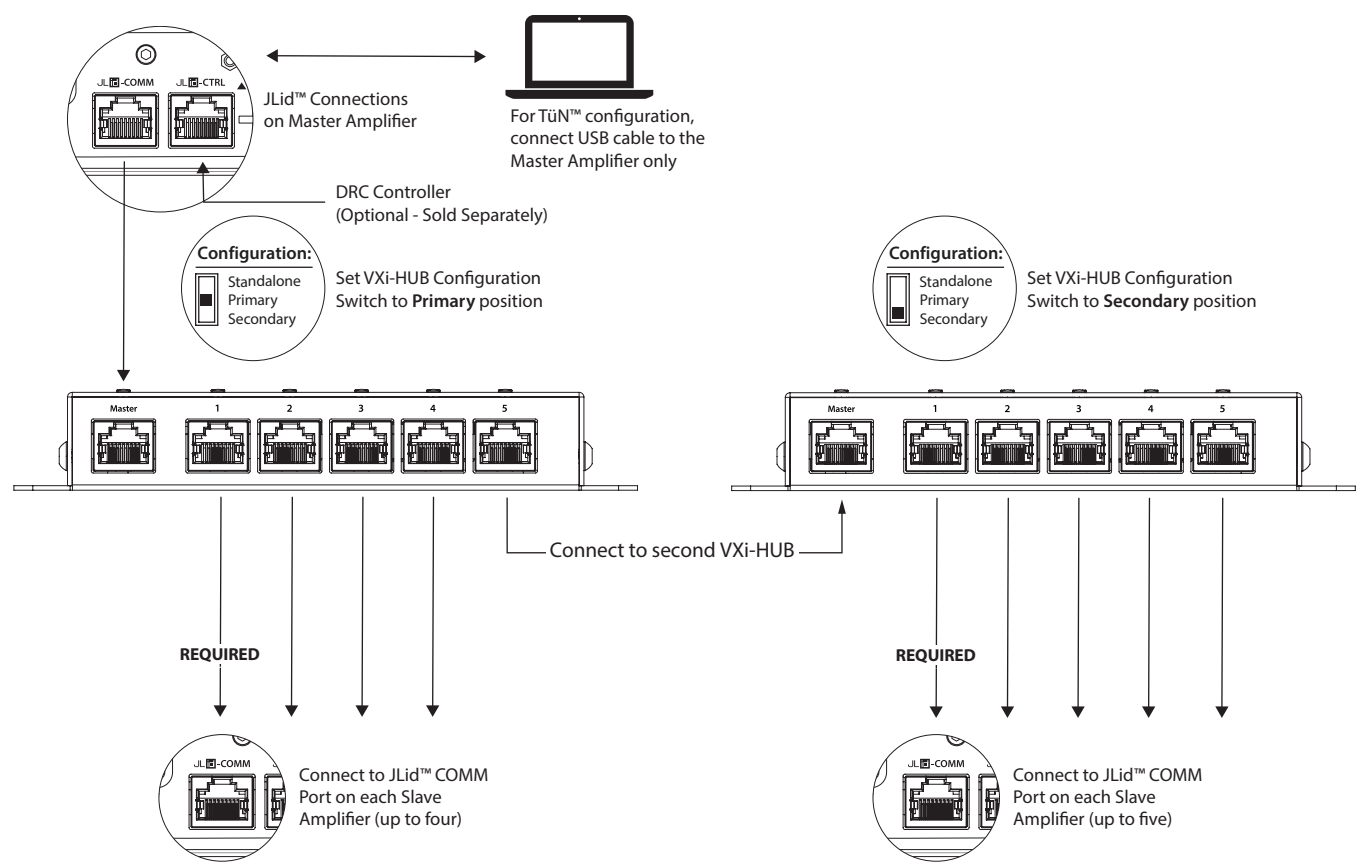
Supports One Master Amplifier and
up to Five Slave Amplifiers



Note:
- JLid™ Network Connections are made via CAT5e Network Cables (not included)
- JLid™ Network Connections support data communication only - No Audio
- Power and Audio Input connections (not pictured) are required for each VXi amplifier.
- Components pictured may not be to scale.

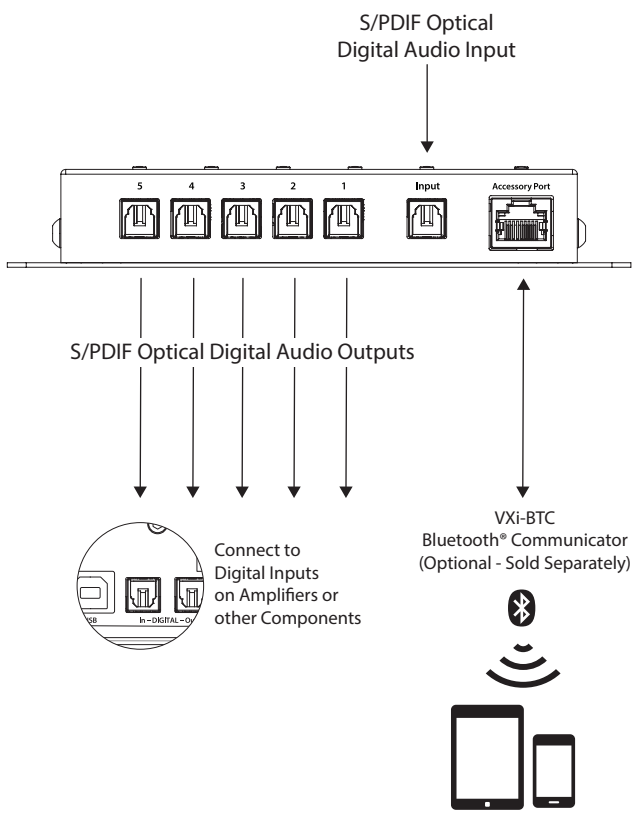
JLid™ Network Connections for two VXi-HUBs

Supports One Master Amplifier and
up to Nine Slave Amplifiers



Note:
- JLid™ Network Connections are made via CAT5e Network Cables (not included)
- JLid™ Network Connections support data communication only - No Audio
- Power and Audio Input connections (not pictured) are required for each VXi amplifier.
- Components pictured may not be to scale.

Optical Digital Audio Connections & Accessory Port



Note:
- Optical Digital Audio Distribution functionality requires a Slave amplifier connection to JLid-COMM Port 1.
- JLid-COMM Accessory Port functionality requires an amplifier connection to the JLid-COMM Master Port.
- In Two-HUB Systems, the JLid-COMM Accessory Port of the Secondary VXi-HUB is non-functional.
- The VXi-BTC provides a control interface only and does NOT support audio streaming.
- Components pictured may not be to scale.

APPENDIX A: FREQUENTLY ASKED QUESTIONS

"Do I still need to send audio input signals to my VXi amplifiers?"
Yes, audio input signals connections are required for each VXi amplifier. For maximum versatility, each VXi amplifier is equipped with analog and digital audio inputs.

"Where do I connect my DRC controller?"
Compatible DRC remote controllers should be connected to the JLid™ CTRL Port of the Master VXi amplifier only.

"Where do I connect my USB A/B cable for TüN™ configuration?"
Compatible computers running TüN™ software should connect to the USB Port of the Master VXi amplifier only.

"What if I don't have an optical output on my source/processor?"
The optical digital audio input and outputs of the VXi-HUB are optional and not required for VXi network communication.

"Can I use the optical outputs for non-VXi amplifiers?"
Yes, the Optical Digital Audio Outputs of the VXi-HUB are compatible with any S/PDIF optical digital (Toslink) input capable of accepting signals up to 24 bit/192 kHz.

Specifications

	Host Interface	Proprietary VXi JLid™ protocol
	Input Operating Voltage	5 VDC
Digital Input	Type	S/PDIF Optical via chassis-mounted Toslink port
	Bit Depth/Sample Rate	Up to 24 bit/192 kHz
Digital Output	Type	S/PDIF Optical via chassis-mounted Toslink port x 5
	Bit Depth/Sample Rate	Up to 24 bit/192 kHz
	Dimensions L x W x H	6.50 in x 3.86 in x 1.05 in / 165 mm x 98 mm x 26 mm

Limited Warranty – Electronics (USA)
JL Audio warrants this product to be free of defects in materials and workmanship for a period of two (2) years from the original date of purchase. This warranty is not transferrable and applies only to the original purchaser from an authorized JL Audio dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, JL Audio will (at its discretion), repair or replace the defective product with new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unit(s). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Warranty is void if the product's serial number has been removed or defaced.
Any applicable implied warranties are limited in duration to the period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

If you need service on your JL AUDIO product:
All warranty returns should be sent to JL Audio 's Amplifier Service Facility freight-prepaid through an authorized JL Audio dealer and must be accompanied by proof of purchase (a copy of the original sales receipt). Direct returns from consumers or non-authorized dealers will be refused unless specifically authorized by JL Audio with a valid return authorization number. Warranty expiration on products returned without proof of purchase will be determined from the manufacturing date code. Coverage may be invalidated as this date is previous to purchase date. Non-defective items received will be returned freight-collect. Customer is responsible for shipping charges and insurance in sending the product to JL Audio. Freight damage on returns is not covered under warranty.

For Service Information in the U.S.A. please call
JL Audio Customer Service:
(954) 443-1100 9:00 AM – 5:30 PM (Eastern Time Zone)
JL Audio, Inc.
10369 North Commerce Pkwy. Miramar, FL 33025
(Do not send product for repair to this address)

International Warranties:
Products purchased outside the United States of America are covered only by that country's distributor and not by JL Audio, Inc.

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