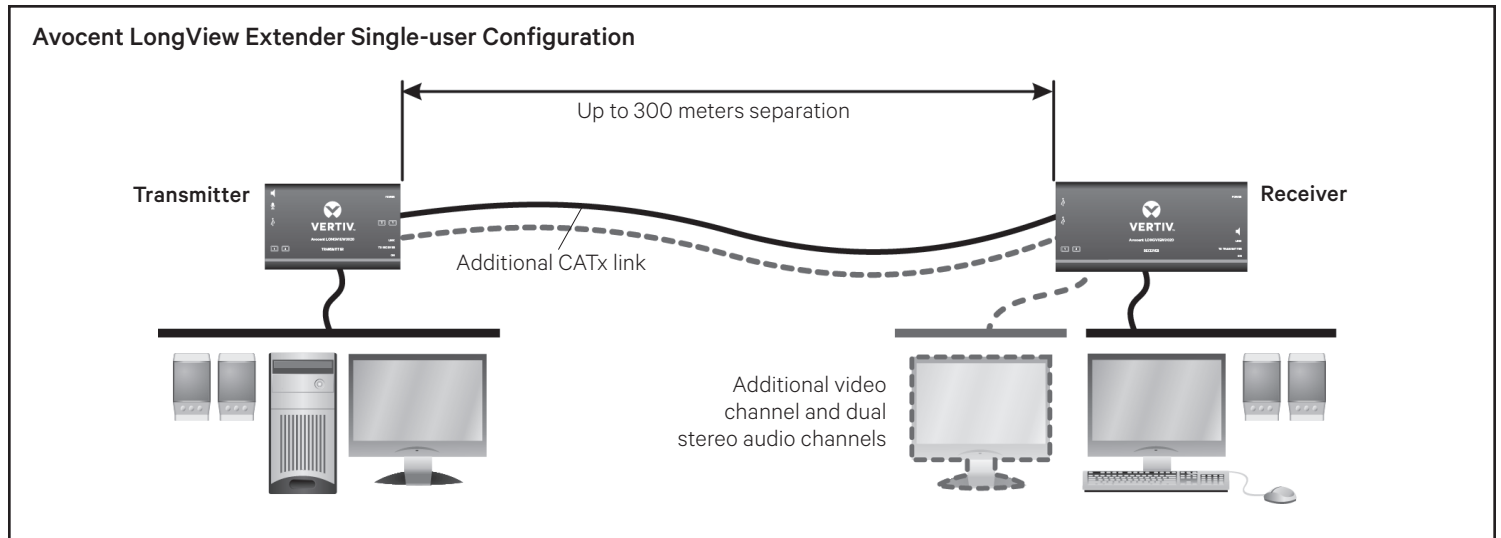


Avocent® LongView™ 3000 Series

High Performance KVM Extender Systems



Quick Installation Guide



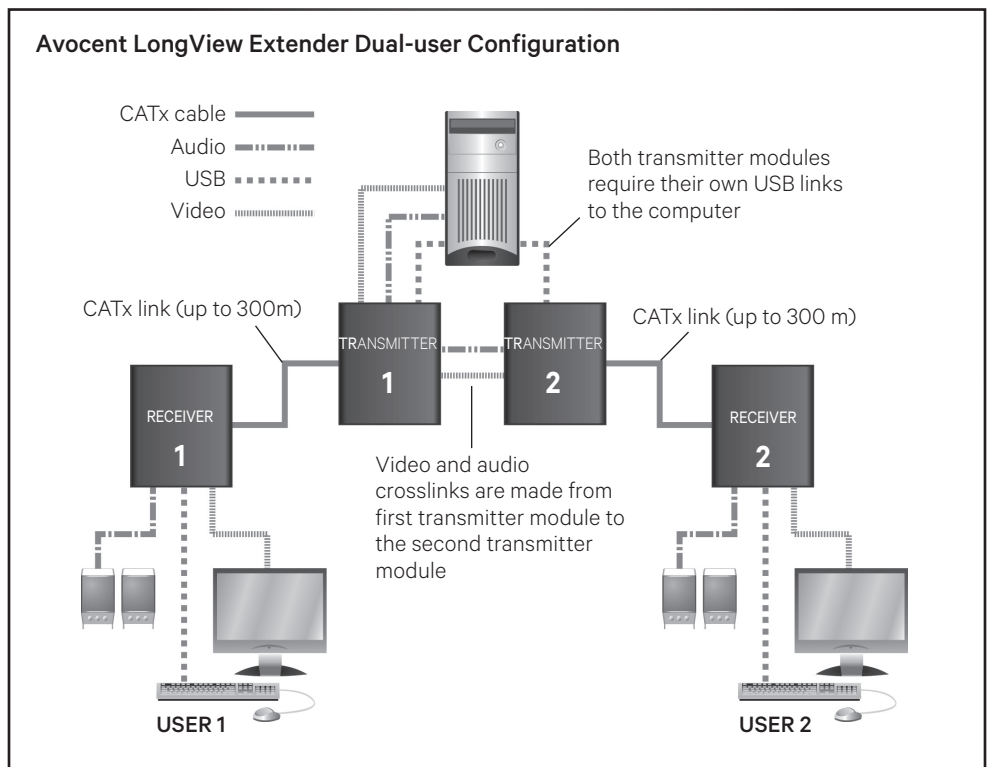
The Avocent LongView high performance KVM extender system provides the fastest way to extend high-quality video, audio and USB data across your network. Transmitter and receivers can be configured in a single- or dual-user configuration to best meet the system needs.

Configuration options are illustrated on the right, and general system information is provided in the following section. Proceed to the next page for installation instructions.

Supported Hardware

Avocent LongView 3010 and 3020 extenders support most standard speakers/headsets, microphones and USB keyboards and mice. While both extender versions provide dual stereo audio, the Avocent LongView 3020 extenders also provide an additional video channel.

Each receiver provides four USB outlets that can individually support USB 2.0 peripherals at speeds of up to 12 Mbps. The USB connections are seamless to ensure that all four full-speed USB 2.0 devices can be used simultaneously with full support for a disconnect/re-connect at any time without causing any system errors.



Video and Audio Features

The Avocent LongView extender system provides CD quality sound and high video resolutions of up to 1920 x 1200. The system supports the Display Data Channel (DDC) scheme, allowing video display capabilities to be optimized by a computer video adaptor.

All receivers also provide Video Compensation mode for the configuration of cable types and lengths, video gains and color skew. Three equalization bands within the receivers ensure that a sharp video image is received every time.

Cable Extension Rules

Use the following table to determine the appropriate cable type to support the distance of your configuration.

Maximum Cable Length	
CAT5 / CAT5e	250 m
CAT6 / CAT7	300 m
CAT7a Patch	200 m

Installation

This section provides steps and figures for system installation. The figures display cable connections that are numbered to indicate to which step they belong. Instructions apply for both modules unless referenced specifically.

NOTE: Prior to the following steps, ensure your computer is turned off.

1. Connecting transmitter video

For the Avocent LongView 3010 transmitter, connect a video cable from the computer to the video port on the left end of the transmitter.

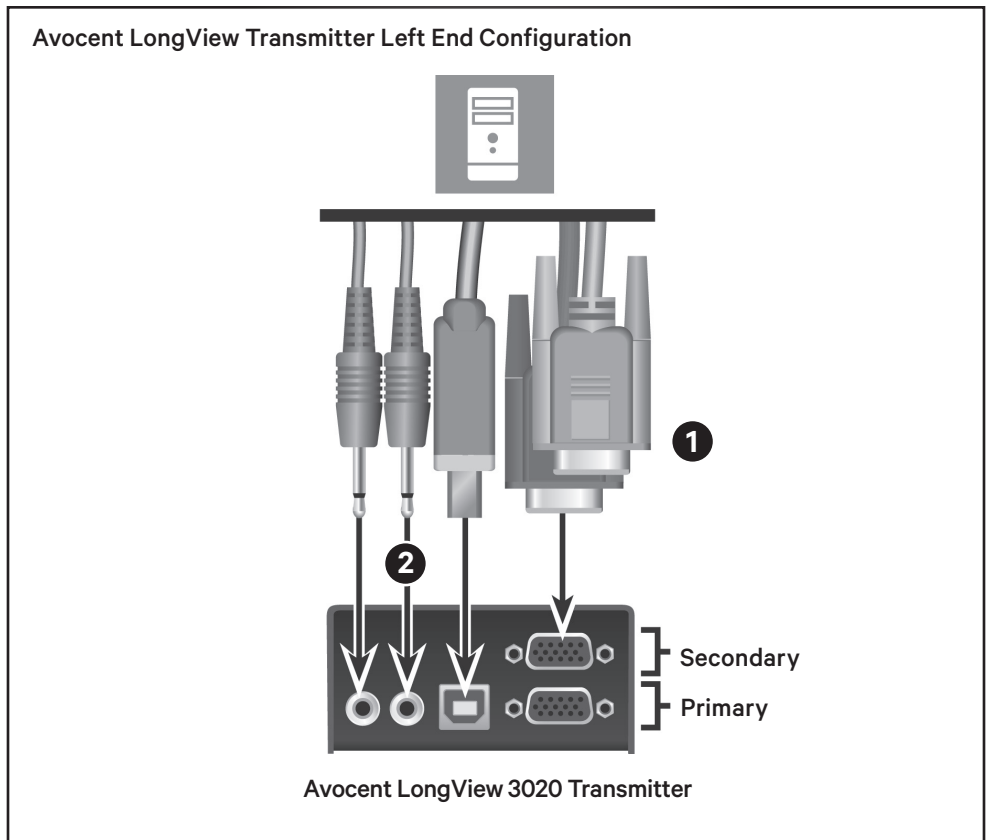
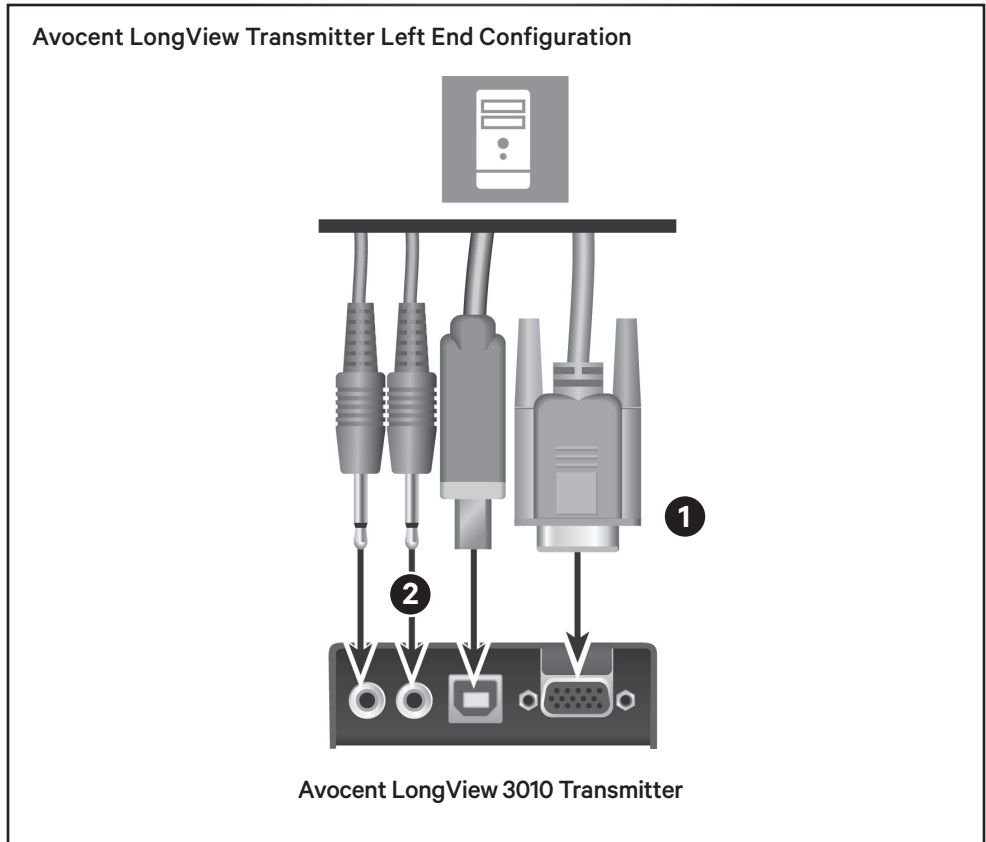
For the Avocent LongView 3020 transmitter, connect the video cable from the primary video port on the computer to the bottom (primary) video port on the left end of the transmitter. Then, connect the cable from the secondary video port on the computer to the top (secondary) video port on the left end of the transmitter.

2. Connecting other transmitter peripherals

Power Connections

The Avocent LongView 3010 transmitter is designed to be powered from the USB port on the left end of the transmitter via a connection from the computer (see step 5).

NOTE: If your computer does not have a high power output for the USB port, the Avocent LongView 3010 transmitter must be powered from the right end with an optional



power adaptor (see step 6). Contact your sales representative for more information.

The Avocent LongView 3020 transmitter must always be powered by the supplied power adaptor (see step 6).

NOTE: Although the Avocent LongView extender system may be used with other USB hubs in the system, due to power constraints, do not connect the transmitter to the downstream port of a bus-powered USB hub.

USB Connections

If the USB port on the left end of the Avocent LongView 3010 transmitter is not used to power the unit, the port can be used for a USB device instead.

To connect a USB device to the left end of an Avocent LongView 3010 or 3020 transmitter, use a cable no longer than three meters and plug the USB connector into the designated transmitter port. Connect the other end to a USB computer port.

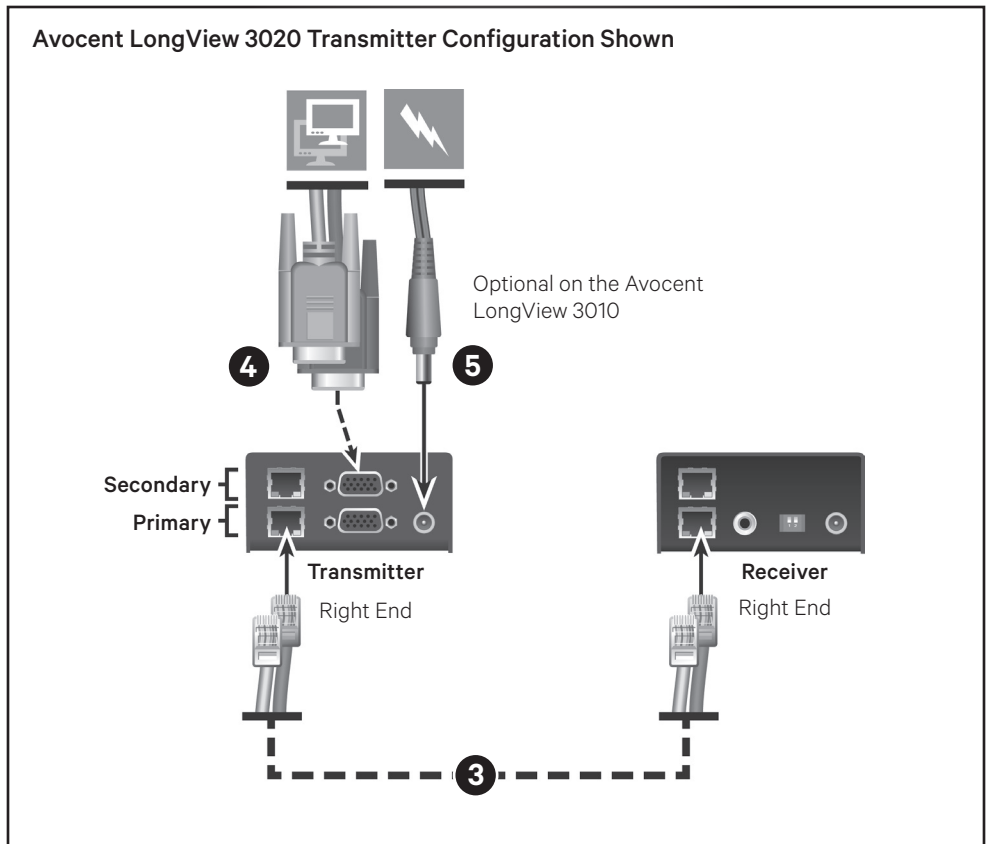
Audio Connections

While audio is usually connected to the receiver (see step 10), if you wish to use the optional speaker connections on the transmitter, attach the cables to the appropriately labeled ports on the left end.

3. Connecting the transmitter to the receiver

On the right end of your extender model, insert one end of a CAT cable into the TO RECEIVER port on the transmitter and the other end into the TO TRANSMITTER port on the receiver.

If you are using the Avocent LongView 3020 extenders, the initial connection is made between the bottom ports on the transmitters and receivers. If you



choose to make a secondary connection on the Avocent LongView 3020 extender, that connection is between the top ports.

4. (Optional) Connecting an additional video monitor to the transmitter in a single-user configuration

NOTE: If you plan to use a dual-user configuration, skip this step.

If you wish to add a video monitor directly to the transmitter, connect the video cable between the monitor and the OUT video port on the right side of the transmitter.

For the Avocent LongView 3020 extenders, the initial connection should be made from the bottom (primary) transmitter port and an additional connection should be from the top (secondary) transmitter port.

5. Connecting transmitter power via the USB port

For the Avocent LongView 3010 transmitter, use a cable no longer than three meters and plug the USB connector into the designated transmitter port on the left end. Connect the other end to a USB computer port with high power output.

6. Connecting transmitter power via the optional power adaptor

NOTE: If you connected the transmitter power via the USB port, skip this step.

If you are using an Avocent LongView 3020 transmitter (or the Avocent LongView 3010 optional power adaptor), assemble the power adaptor and the power cord. Insert one end of the power cord into the transmitter and plug the other end into an appropriate power source.

7. (Optional) Expanding your system to a dual-user configuration

In a dual-user configuration, a single computer is controlled from two transmitters (Transmitter 1 and Transmitter 2). Each extender receives the same audio and video output and also has equal concurrent control over the computer. General installation is already complete for Transmitter 1 if you have completed steps 1-5.

NOTE: Arbitration between extenders is handled via a computer USB system, so this configuration is best suited for users that do not frequently require simultaneous access.

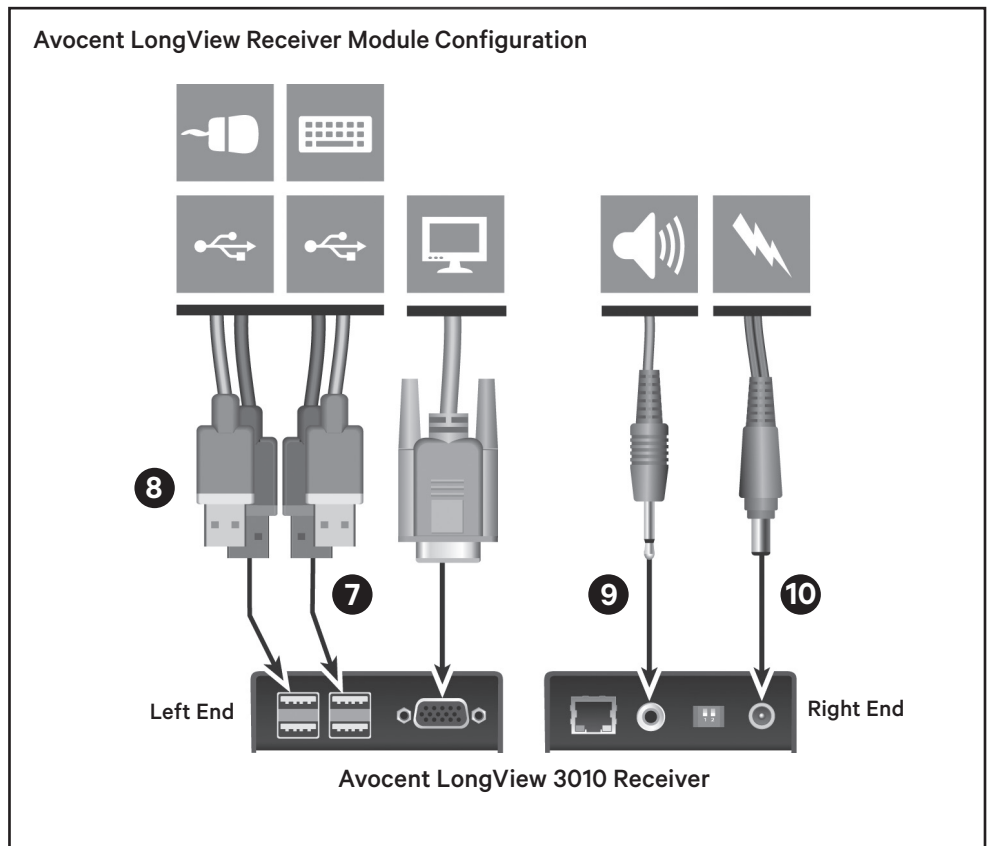
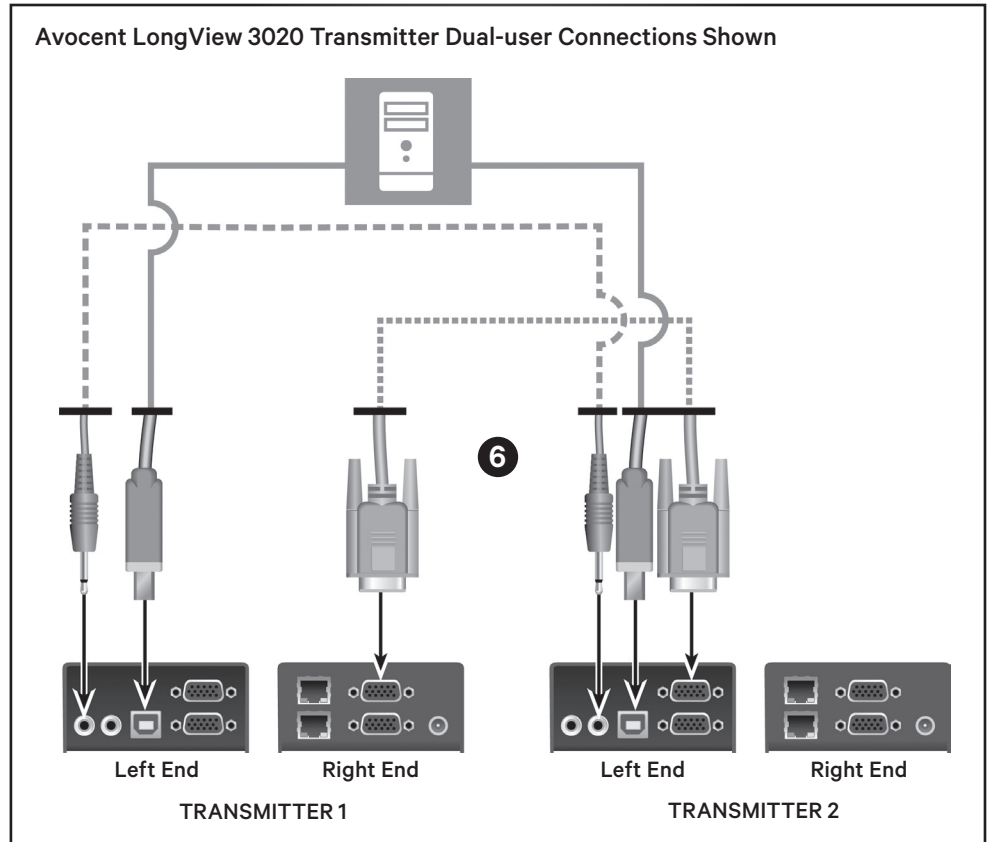
To connect video to Transmitter 2, insert one end of a video cable into the video port on the left side of Transmitter 2. Plug the other end into the video port on the right side of Transmitter 1.

NOTE: For Avocent LongView 3020 transmitters, the initial connection should be made between the bottom (primary) transmitter ports and any additional connections should be from the top (secondary) transmitter ports.

For both transmitter models, establish the USB connection to the computer by using a cable no longer than three meters to plug the USB connector into the Transmitter 2 extender USB port and connect the other end to a USB computer port. Connect an audio cable from the OUT audio port on the left side of Transmitter 1 to the IN audio port on the left side of Transmitter 2. Repeat step 3 to connect Transmitter 2 to a receiver, then repeat step 5 to connect the transmitter power.

8. Connecting receiver video

On the left end of the Avocent LongView 3010 receiver, connect a video cable from your monitor to the video port on the receiver.



On the left end of the Avocent LongView 3020 receiver, connect the cable from the video port on a monitor to the bottom (primary) video port on the receiver. Then, connect the cable from an additional video port on a monitor computer to the top (secondary) video port on the receiver.

9. Connecting the keyboard and mouse

For either model, plug one end of the keyboard and mouse connectors into USB ports on the left end of the receiver and plug the other ends into USB computer ports. The extender system allows up to four USB devices to be connected at once.

NOTE: Ensure the total power requirements of the connected USB devices does not exceed 1.7 A, preferably with a maximum allowable current draw of .5 A per device. Each extender contains a self-resetting fuse that will shut the extender down to prevent damage if the total power draw is excessive.

10. Connecting audio

On the right end of the receiver for both models, attach the speaker and microphone cables to the appropriately labeled ports.

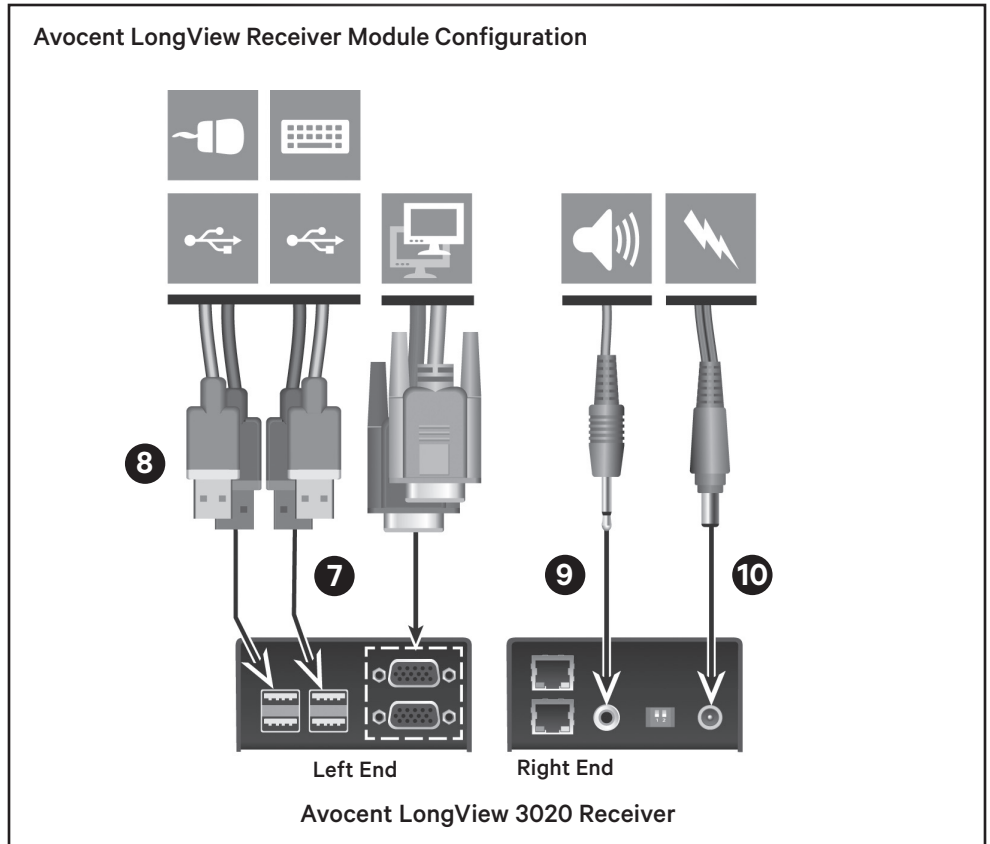
11. Connecting receiver power

For both models, assemble the power adaptor and the power cord. Insert one end of the power cord into the POWER port on the right end of the receiver and plug the other end into an appropriate power source.

12. Powering the extender system (either model)

NOTE: If you plan to use a dual-user configuration, ensure steps 7-11 are completed for both receivers.

Turn on the monitor and the receiver. If the transmitter is not powered by the computer, turn it on next.



When you turn on the transmitter, observe the green LED lighting pattern on the right side of the extender. Then, turn on the computer.

Verifying Transmitter Video Data

It is not possible for video display data to be transmitted from the monitor at a receiver, across the transmitter, and then to the computer video adaptor. To compensate for this, the Avocent LongView extender system uses a DDC scheme to prompt a transmitter to read and store the data from the receiver monitor and share it with the computer, as needed. This DDC data search takes place at the transmitter Video Out port when the extender is turned on and status is shown via LEDs on the TO RECEIVER port.

NOTE: Dual video channels are handled separately for Avocent LongView 3020 extenders. If you wish to capture DDC data from both receiver monitors, temporarily connect both monitors to the Video Out ports on the transmitter.

When you turn on the transmitter, a green LED will flash once to indicate that data is being read. If the information matches what is already stored on the transmitter, normal extender operations resume. If the information is different, the green LED will flash rapidly as new information is stored. A single flash after that indicates that normal operations will resume.

LED Flashing Indications

- Two flashes: Indicates a checksum error occurred and no information is programmed.
- Three flashes: Indicates too much data to fit into the extender; the extender holds no more than two pages of DDC data.
- Rapid flashing, then four flashes: Indicates data was lost during copying and default data was substituted; power cycle the transmitter.
- Rapid flashing, then five flashes: Indicates a checksum error

during copying and default data was substituted; power cycle the transmitter.

Adjusting Receiver Video Quality

Avocent LongView receivers contain a video compensation system that allows you to delay or advance timing of color signals so that they arrive at the video monitor at the correct times and provide an optimal display of video content. Receivers feature a miniature switch to enable Video Compensation mode. Enable this mode by moving

miniature switch 1 to the ON position. When enabled, the Num Lock, Caps Lock and Scroll Lock keys on the USB keyboard at the receiver will flash in sequence. A green LED located on the TO TRANSMITTER port on the receiver will also flash.

NOTE: During Video Compensation mode, all connected USB devices are temporarily isolated from the computer.

The key flashing sequence indicates Standby level within Video Compensation mode. From this level,

set the cable types and lengths, then use the video gain and color skew adjustments to fine-tune the receiver video image.

See the Video Compensation Adjustments table below for more information.

Move miniature switch 1 on the receiver to the off position to exit the Video Compensation mode. All USB devices are then reconnected and normal operations resume.

Video Compensation Adjustments Table

Adjustment	To Activate	Flashing Indicators	Description
Video Compensation Changes to each Avocent LongView 3020 extender channel separately	Press H	Alternate flashing between Num Lock and Scroll Lock, then Caps Lock	Press 1 or 2 to select the primary or secondary video display. Make any compensation changes indicated in this table, then press H and 0 . The green LEDs on your receiver will flash.
Set Cable Type	Press C	Num Lock and Caps Lock	Press the number that corresponds to the category of cable used: <ul style="list-style-type: none"> • Press 1 for CAT5 • Press 2 for CAT5e • Press 3 for CAT6 • Press 4 for CAT7 • Press 5 for CAT7a. Press Enter to save or Esc to discard and return to standby.
Set Cable Length	Press L	Caps Lock and Scroll Lock	Use the keyboard to enter the cable length in meters. Use the Up Arrow or Down Arrow keys to increase/decrease the setting. Press Home to return to a neutral setting. Press Enter to save or Esc to discard and return to standby.
Change Video Gain Level	Press the Left Arrow or Right Arrow key	N/A	The arrow keys enable you to increase or decrease the setting. Press Home to return to a neutral setting. Gain adjustments are saved automatically.
Fix Color Skew	Press R, G or B	Num Lock (Red), Caps Lock (Green), Scroll Lock (Blue)	Use the Left Arrow or Right Arrow to adjust the delay for chosen color. If the screen goes blank, press the opposite Arrow key or press Home . Press Enter to save or Esc to discard and return to standby.



THIS PAGE INTENTIONALLY
LEFT BLANK



To contact Vertiv Technical Support: visit www.Vertiv.com

© 2024 Vertiv Group Corp. All rights reserved. Vertiv™ and the Vertiv logo are trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness here, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions.

