Sound Control Technologies

RTK-AM1™

SCTLink3™ Cable Considerations

Tech Support: 203-854-5701

Cable Type	Max Video resolution	Range - Typical
CAT6A (U/FTP)	4K/60Hz/4:4:4 video formats	100 meters (straight) 70 meters (with patches)
	4K/60Hz/4:2:0 HDR 12bit video formats	100 meters (straight or with patches)
CAT6A (F/UTP)	4K/60Hz/4:4:4 video formats	70 meters (straight)
	4K/60Hz/4:2:0 video formats	100 meters (straight) 70 meters (with patches)
CAT5e/CAT6 (UTP)	4K/60Hz/4:4:4 video formats	40 meters (straight) 30 meters (with patches)
	4K/60Hz/4:2:0 HDR 12bit video formats	70 meters (straight or with patches)

The above guidelines represent what has been tested to consistently and reliably operate properly at the given resolutions. While not as critical when the cable length is shorter, as the length of the cable increases, the necessity for proper cable management and termination practices also increases. Actual system performance may be dependent on cable manufacturers' adherence to published specifications.

For best results, please refer to the following best practices during the installation of cabling:

- Minimize or eliminate patches/connections in the cabling. (each connection introduces loss)
- Adhere to minimum bend radius for the chosen cabling.
- Avoid coiling of cable (coiling can result in crosstalk)
- Properly terminate shielded cable with shielded connectors and connect the shield at both ends.
- Avoid tightly bundling cables with other cables to avoid crosstalk interference.
- If 4:4:4 video is not needed, consider lowering to a 4:2:0 resolution.
- If 4K video is not needed, consider lowering to an HD resolution.
- Isolate the cable from other noisy power cables or other sources of EMI.
- Use shielded cabling whenever possible.

Any one of the above factors may not affect proper operation on its own, but when added together they can have a cumulative effect in increasing (or reducing) performance.