



L-ACOUSTICS CABLES

FEATURE OVERVIEW

September 2021

DOE CABLES

L-Acoustics DOE cable solutions offer dependable and simple interconnects for systems using LA-RAK II AVB, or anywhere a redundant Milan-AVB network architecture is implemented. DOE cables are available in three lengths to enable interconnection between Front of House and stage, cross stage, between racks, or to connect any other network devices. Seamless Milan-AVB redundancy is supported with dual CAT6A cables housed in a single ruggedized and flexible protective jacket. Each CAT6A cable is terminated with a Neutrik etherCON™ connector.



Color coding

A simple color-coding system has been used to enable error free deployment and simple fault finding. The black jacket indicates the primary Milan-AVB connection and red indicates the secondary. No need to read numbers, letters or coded messages written on pieces of tape. A clear thermo-retractable sheath is also included to accommodate a custom label for the cable.

Cable lengths

There are three DOE cable lengths available:

- DOE2: Overall length 2.4m (1.7m + 2 x 0.35m breakout)
- DOE45: Overall length 45m (43m + 2 x 1m breakout)
- DOE100: Overall length 100m (98m + 2 x 1m breakout)



Cable	Description	Application
DOE2	Dual AVB Network cable CAT6A, etherCON, 2m length	Inter-Rack links P1 to LS10 links at FOH
DOE45	Dual AVB Network cable CAT6A, etherCON, 45m length	Cross-stage links
DOE100	Dual AVB Network cable CAT6A, etherCON, 100m length	FOH to Stage links

Advantages

DOE cables bring many advantages when deploying L-Acoustics systems. They can be used to connect an entire system, incorporating P1 and LA-RAK II AVB, or any devices that utilize the Milan-AVB protocol. The use of Milan-AVB realizes a time sensitive network architecture, adding seamless redundancy and dependability. In addition, the DOE cable solution simplifies and accelerates system setup, minimizing cabling errors and time-consuming fault-finding processes.

Using DOE cables:

- Removes risks of incorrect patching, as all audio channels and control use a single connector
- The simple and consistent color coding drastically reduces the chance of errors when wiring a system
- Only two connections are required between devices, increasing speed of setup, compared with multiple XLR's for AES or analogue schemes
- Ensures dramatic savings in transport, weight and storage space compared with equivalent AES or analogue architecture
- Ensures longevity in touring applications thanks to the ruggedized and reinforced materials used
- Offers resilience to frequent winding/unwinding due to a highly flexible cable

Using Milan-AVB:

- Guarantees on-time delivery of time-sensitive data, unlike other network audio protocols
- Provides seamless network redundancy
- Assures plug-and-play interoperability of any Milan-certified device
- Network setup is made fast and simple thanks to the auto-discovery of devices
- Grants the ability to control routing remotely, which means the need to physically go to racks to diagnose and correct patching errors is removed

DOE cables specifications

Electrical specifications

Attenuation at 100 MHz in dB/100 m	< 27 dB
Return loss at 100 MHz in dB/100 m	> 20 dB

Physical specifications

Operating temperature	- 25° C / + 70° C
-----------------------	-------------------

Main cable section

Minimum bend radius	160 mm
Outer diameter	Ø 25.20 mm

Breakout section

Minimum bend radius	50 mm
Outer diameter	Ø 8.4 mm
Conductor	Flexible core - AWG 23/7

Standard conformity

DOE cables conform to	IEC 61156-5 I
	IEC 61156-6 I

Deployment example

