

# STANDARDS AND INFORMATION DOCUMENTS

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**STANDARDS**

## **AES standard for interconnections - Data connector in an XLR connector shell**

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# **AES standard for interconnections - Data connector in an XLR connector shell**

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## **Abstract**

Commonly used modular connectors are widely used, but are fragile in demanding installations, where a broken connection can affect the application critically. This is not important in many applications, such as structured data cabling for use with computer networks, or simple interconnect cabling and patching using Category 5 (or better) data cable. However, in professional audio applications, a broken connection can affect the application critically. A standard ruggedized fitting will promote system security in these applications. This document specifies a ruggedized data connector that is compatible with 8-position 8-contact (8P8C) modular connectors, commonly (though inaccurately) called RJ-45 connectors, with regard to mechanical aspects for proper mating and locking.

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### **Foreword**

This foreword is not part of AES63-2012, *AES standard for interconnections - Data connector in an XLR connector shell*.

The standard was developed under project AES-X130 by the SC-05-02 working group on Audio Connectors. It was motivated by the understanding that the development of digital audio has necessarily expanding to include cables and connectors common in conventional computer applications. However, many audio professionals operate in more rugged conditions than the office environments familiar to IT installers; and so they need appropriately rugged connections.

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2012-05-18

### **Note on normative language**

In AES standards documents, sentences containing the word “shall” are requirements for compliance with the document. Sentences containing the verb “should” are strong suggestions (recommendations). Sentences giving permission use the verb “may”. Sentences expressing a possibility use the verb “can”.

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# **AES standard for interconnections - Data connector in an XLR connector shell**

## **Introduction**

There is a growing market for a number of audio applications that use data-connecting cabling and hardware the same as that being used for structured wiring in IT infrastructures, for example in Ethernet networks. As a result the use of ubiquitous “Category 5” data cables and the related modular connectors is becoming more and more popular.

Commonly used modular connectors are widely available but are fragile in demanding installations. A standard ruggedized fitting will promote system security in these applications.

The AES has a particular interest in professional audio installations which need physically secure data connections for high signal integrity.

This standard will help system integrators, designers, installers and users of data for professional audio and associated media in choosing a connector system which is already approved for its ruggedness and reliability in just these application areas. Based on the dimensions of the convenient XLR connectors the space requirements are comparable and the required panel cutouts in equipment are even compatible. The identical locking mechanism facilitates handling.

The standard will also greatly simplify equipment and cable compatibility.

## **0 Preamble**

### **0.1 Patents**

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### **0.2 Documentation conventions**

Following ISO convention, decimal points are conventionally shown as commas (,) unless an alternative, such as a period (.), is expressly stated here, with justification.

All dimensional values are indicated in mm.