

Cello Strings Cables

Cello has designed its own proprietary system of cables in order to provide the ultimate in balanced line signal transmission and speaker connections. Several types of Cello Strings cables are available with a variety of terminations in standard and custom lengths.

Cello Strings 1

Cello Strings 1 is a three-conductor shielded cable for balanced line connections between preamplifiers, equalizers, power amplifiers, and associated equipment. Cello Strings 1 cables are terminated with Fischer connectors for mating with Cello equipment, and with XLR or RCA connectors for mating with balanced or unbalanced inputs on conventional equipment. Each conductor of Cello Strings 1 consists of high purity, oxygen-free copper Litz wire in a heavy tenon jacket. Three of these conductors are encased in a high-quality shield and a heavy outer jacket.

Cello Strings 1 is different in many ways from conventional balanced line cable. Because of its Litz construction, inductance is kept to very low amounts so that high frequency energy is preserved. The capacitance of a balanced line cable is generally much higher than the one of an unbalanced cable due to the coupling of each conductor to the other conductors as well as the shield. Capacitance in balanced line cables is a direct load to circuits driving the cable. Because Cello Strings 1 has very low capacitance, one third to one tenth the amount of standard balanced line cables, output stages are not as capacitively loaded. This translates into cleaner, less compressed sonic quality.

Some cables are called "balanced", but only offer two conductors and a shield. Such cables can be a source of grounding problems due to the tying of audio ground (pin 1) to earth (case), or no shield connection to the case. There are interconnect cables on the market more costly than Cello Strings 1. We believe that Cello Strings 1 is the highest performance cable available and priced fairly. Since Cello Strings cables are made at the factory or by authorized agents only, their quality of termination is outstanding. Cello guarantees the sonic performance of its products when used with Cello Strings 1 cable.

Cello Strings 2

Cello Strings 2 is a high quality speaker cable, comprised of a large number of very fine conductors in a red (high side, +) or black (low side, -) jacket. Tri-wire harnesses for Stradivari and Amati speakers are available, consisting of three red and three black wires in an expando (black net) sleeve. At the speaker end, three red wires and three black wires are separately terminated with spade or donut lugs. At the amplifier end, the three red wires and three black wires are tied to one red lug and one black lug respectively. for easy connection to barrier strips and other speaker cable connectors.

Cello Strings 3

Cello Strings 3 is a heavy Litz construction speaker cable for the ultimate in power amplifier signal transmission. Cello Strings 3 is comprised of two conductors separated by a 0.2 inch web. Each conductor contains a large number of very fine Litz wires. Terminations are spade or donut lugs. Cello Strings 3 is particularly recommended for Stradivari speakers. Strad CS3 tri-wire harnesses contain three pairs of conductors within an expando (black net) sleeve. Each termination is via a separate lug. Due to the large amount of copper which must be heated for proper soldering to occur, CS3 should only be terminated by trained personnel using appropriate equipment.

Why Fischer Connectors'?

Owners of high quality audio equipment are searching for ways of optimizing performance with balanced lines. XLR connectors are the industry standard for balanced lines. Unfortunately, XLR connectors do not meet Cello's standards for performance, reliability, and consistency. Through many years of experience, we have found that Fischer connectors sound better than other types we have tested and do not break or degrade over time. Made in Switzerland with the finest materials and machined to incredibly precise tolerances. Fischer connectors are far more costly than XLRs, hard to obtain, and more complex to assemble. Cello believes that the benefits outweigh these obstacles, especially for equipment designed to last for many decades.

The contact action in a Fischer connector is provided by a precisely made pin entering a socket in which tiny leaves put pressure in a 360 degree pattern all around the body of the pin. After 50,000 make/break cycles, there is no measurable wear. In contrast, after only a few make/break cycles, the gold plating on XLR connector pins is worn through, if they are of the gold plated type. Silver type pins generally turn black over time causing contact degradation. The mating action of the XLR pin and socket is crude by comparison to the Fischer. Also, the shield connection and the mechanical locking of the Fischer are positive, which is not always the case with XLRs.

The Fischer connectors used in Cello equipment are chassis female for inputs, chassis male for outputs, pin 1 is ground, pin 2 is "+", pin 3 is "-"

- Types of Cello Strings 1 Cable**
- Fischer to Fischer, used for Cello balanced line connections.
 - Fischer to XLR, used for Cello to non-Cello balanced line connections.
 - Fischer to RCA, for Cello balanced to Cello or non-Cello unbalanced line connections.
 - RCA to RCA, used for Cello or non-Cello unbalanced line connections.

Cello balanced inputs require a Fischer male termination. Cello balanced outputs require a Fischer female termination. Cello balanced line cables have a male on one end and a female on the other end.

Cello Adaptors

Cello makes a series of adaptors which allow Cello balanced lines to interface easily and correctly with unbalanced equipment. There is an F series and a C series of adaptors. The E series adapts equipment by plugging into Fischer chassis connectors and converting them to female RCA or Camac. The C series snaps on the end of a cable and converts it to male RCA or Camac.

E Series Adaptors

<u>Adaptor Type</u>	<u>converts Balanced</u>	<u>to</u>	<u>Unbalanced</u>
E1	Chassis input		Camac female
E2	Chassis output		Camac female
E3	Chassis input		RCA female
E4	Chassis output		RCA female

C Series Adaptors

<u>Adaptor Type</u>	<u>Connector Type</u>	<u>to</u>	<u>Connector Type</u>
C1	Camac male		Fischer male
C2	Camac male		Fischer female
C3	RCA male		Fischer male
C4	RCA male		Fischer female

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