



CAT 5e
CAT 6
CAT 6a
CAT 7a



CORDIAL GMBH - COMPANY PROFILE

This is us...

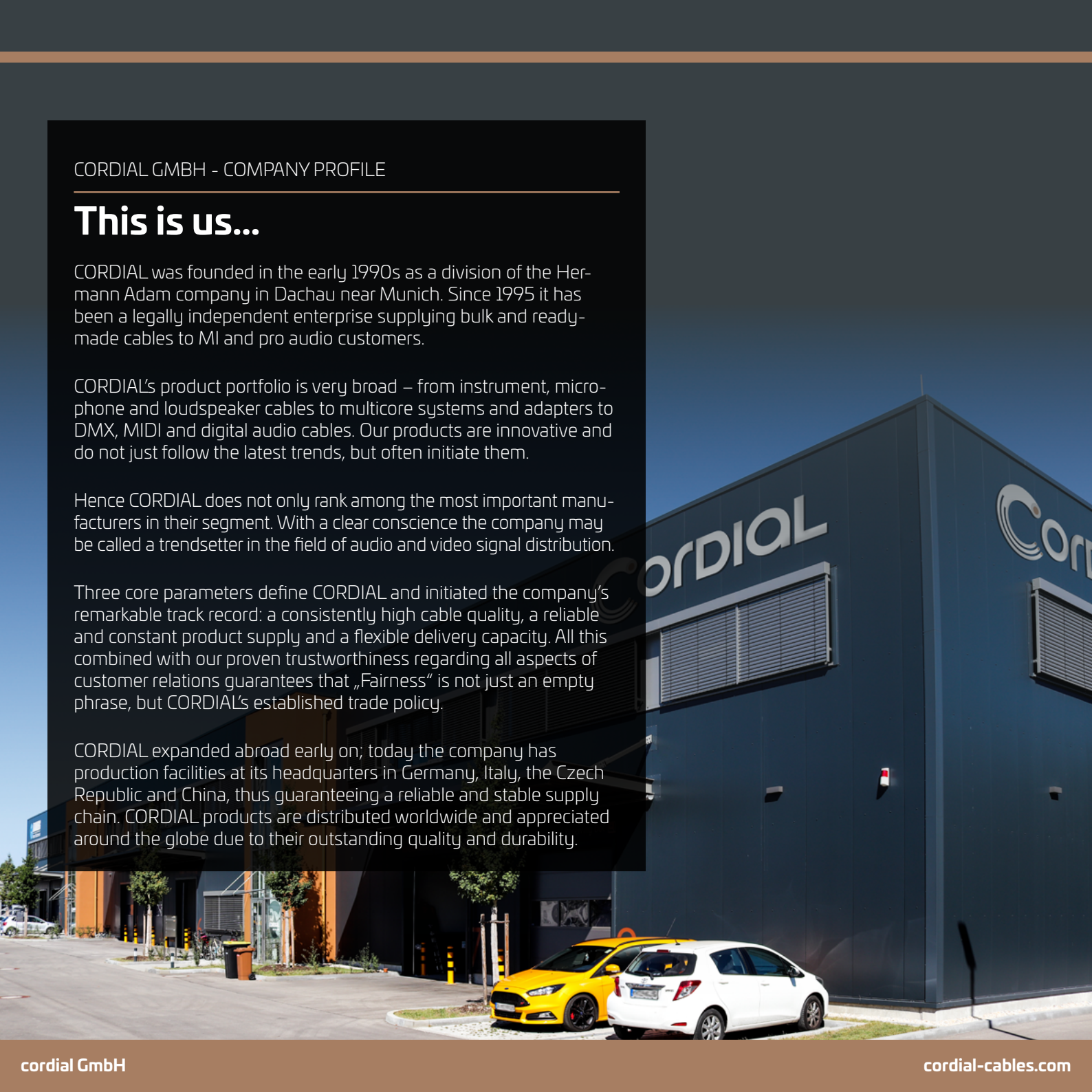
CORDIAL was founded in the early 1990s as a division of the Hermann Adam company in Dachau near Munich. Since 1995 it has been a legally independent enterprise supplying bulk and ready-made cables to MI and pro audio customers.

CORDIAL's product portfolio is very broad – from instrument, microphone and loudspeaker cables to multicore systems and adapters to DMX, MIDI and digital audio cables. Our products are innovative and do not just follow the latest trends, but often initiate them.

Hence CORDIAL does not only rank among the most important manufacturers in their segment. With a clear conscience the company may be called a trendsetter in the field of audio and video signal distribution.

Three core parameters define CORDIAL and initiated the company's remarkable track record: a consistently high cable quality, a reliable and constant product supply and a flexible delivery capacity. All this combined with our proven trustworthiness regarding all aspects of customer relations guarantees that „Fairness“ is not just an empty phrase, but CORDIAL's established trade policy.

CORDIAL expanded abroad early on; today the company has production facilities at its headquarters in Germany, Italy, the Czech Republic and China, thus guaranteeing a reliable and stable supply chain. CORDIAL products are distributed worldwide and appreciated around the globe due to their outstanding quality and durability.



smart solutions for professional data transmissions

Cordial Ethernet Cables

In order to meet the diverse requirements of modern event technology in the field of data transmission, Cordial is well-positioned with its wide product range of Ethernet cables.

Our bulk cables on offer range from category Cat 5e with 100MHz bandwidth to data class Cat 6A cables with 600 MHz right up to products for the data transmission of high-frequency signals according to Cat 7a (1000 MHz) standards.

Cordial products offer the best possible solutions for a wide and varying range of challenges such as drag chain suitability, flame retardance; they meet halogen-free standards and offer low attenuation, flexibility and long distance suitability.

Moreover, we offer multicore / hybrid solutions with which independent networks can be implemented (for example 4 x Cat 7A, 2 x Cat 7A Long Run + Power + DMX).

A PUR jacket is used whenever a cable will probably be exposed to adverse outdoor conditions and must, nevertheless, function safely and loss-free.

For stationary (indoor) installations, flame retardant and halogen-free FRNC cables (flame retardant non corrosive) are employed.



cordial
data cables



Cat 5e cable easy to be reeled

CCAT 5

If you're looking for a highly mobile, robust network cable that can even be used in a drag chain on stage, you should turn to our CCAT 5 data cable. Its mechanical properties meet the CAT 5e standards for network cables and transmit data within a bandwidth of 100 MHz. A sturdy PUR jacket protects the robust and extremely flexible cable from environmental damages and mechanical strains.



max. bandwidth	100 MHz
Conductor area	0.15 mm ² (AWG 26)
Composition of conductor	19 x 0.1 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen	S/UTP tinned copper braid
Overall jacket	PUR
Diameter	6.4 mm
Weight	51 g/m



Cordial

CCAT 5

DATA CATEGORY 5E

Cordial

Cat 5e cable with PVC jacket

CCAT 5 PVC

The CCAT 5 PVC is the more cost-effective variant of the CCAT 5. In contrast to the latter, it does not feature a jacket made of polyurethane (PUR), but one consisting of polyvinyl chloride (PVC). This makes it considerably less expensive without having to fear any substantial loss in quality. Moreover, it is still highly flexible, robust and easily reelable. Contrary to conventional Ethernet cables, Cordial protects its Cat 5e cables against external interference with an overall shield made of tinned copper. This allows Cordial CCAT 5 cables to be laid out close to current-carrying components and cables without any ensuing problems.



max. bandwidth	100 MHz
Conductor area	0.15 mm ² (AWG 26)
Composition of conductor	7 x 0.16 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen	SF/UTP tinned copper braid + foil (AL/PT)
Overall jacket	PVC
Diameter	6.5 mm
Weight	50 g/m



CORDIAL DATA CABLE CATEGORY 5e CCAT 5 PVC

Cat 6 cable, dragchain-flexible

CCAT 6 highflex

Its special design (Separator-Cross) separates the wire pairs from each other, thus reducing crosstalk between the cores. The double shielding accomplished by a CU wire braid and foil effectively prevents external interference (SF/UTP). This special design allows a higher bandwidth of up to 250 MHz (instead of up to 100 MHz for CCAT 5 and CCAT 5-PVC).

The CCAT 6 HIGHFLEX is suitable for drag chain use due to its special design as well as its robust jacket and is, therefore, especially suited for mobile and flexible applications.



max. bandwidth	250 MHz
Conductor area	0.15 mm ² (AWG 26)
Composition of conductor	19 x 0.1 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen	SF/UTP bare copper braid + foil (AL/PT)
Overall jacket	PUR
Diameter	7.5 mm
Weight	59 g/m



CORDIAL GERMANY DATA CATEGORY 6 CCAT 6 HIGHFLEX

Cat 6a installation cable

CCAT 6a inst-frnc

The permanent installation of indoor cables means that flexibility is not the main issue here but that in case of fire cables must be as nonpolluting as possible, i.e. they should comply with CPR safety requirements. To cope with a growing data amount, our CCAT 6a INST-FRNC transmits within a bandwidth of 500 MHz according to Ethernet data category 6a standards. As this cable is equipped with pair shield foils and strong copper conductors it allows remarkably low-loss data transmission over long distances and also supports the power supply over EtherNet (PoE). It is flame-retardant and halogen-free and complies with the European CPR fire classification Dca.



max. bandwidth	500 MHz
Conductor area	0.26 mm ² (AWG 23/1)
Composition of conductor	132 mm massi- ve bare copper
Comp. of cores	4 pairs (PimF)
Screen	U/FTP
Pair Screen	foil (AL/PT)
Overall jacket	FRNC compound
Diameter	7.3 mm
Weight	50 g/m



CORDIAL GERMANY DATA CATEGORY 6A CCAT 6A INST-FRNC

Cat 7a

Cat 7a double shielded cable

CCAT 7

Should the Cat 5e not be sufficient for the required data transmission volume you can turn to our CCAT 7 cable which offers a 10 times higher transmission bandwidth. A double shielding (S/FTP) protects the Cat. 7a high-frequency signals and allows the signal transmission within a bandwidth of 1,000 MHz (1 GHz, Gigabit Ethernet). A sturdy PUR jacket protects the robust and extremely flexible cable from environmental damages and mechanical strains.



max. bandwidth	1000 MHz
Conductor area	0.14 mm ² (AWG 26)
Composition of conductor	7 x 0.16 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen	S/FTP tinned copper braid
Pair Screen	foil (AL/PT)
Overall jacket	PUR
Diameter	6.3 mm
Weight	33 g/m



Cordial GERMANY DATA CATEGORY 7A CCAT 7

Cat 7a cable easy to be reeled

CCAT 7A long-run

For all data-intensive applications we can offer you our CCAT 7A LONG-RUN cable for data transmission over longer distances according to Ethernet Cat. 7a standards. A double shielding (S/FTP) protects the Cat. 7a high-frequency signals and allows the signal transmission within a bandwidth of 1,000 MHz (1 GHz, Gigabit Ethernet). Reelable, featuring a sturdy PUR jacket and strong copper conductors (AWG 23) and allowing a remarkably low-loss data transmission over long distances. Also supports the power supply over EtherNet (PoE).



max. bandwidth	1000 MHz
Conductor area	0.26 mm ² (AWG 23/7)
Composition of conductor	7 x 0.23 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen	S/FTP tinned copper braid
Pair Screen	foil (AL/PT)
Overall jacket	PUR
Diameter	8.2 mm
Weight	72 g/m



Cordial GERMANY DATA CATEGORY 7A CCAT 7A LONG-RUN

4x Cat 7a multicore

CCAT 7A Quad

Our CCAT 7A QUAD is a multicore data cable featuring 4 integrated, high-performance Ethernet connections in just one cable. The cable comprises 4 CCCAT 7A long run network cables (S/FTP, double shield, AWG 26/7), in PVC coating. The 4 Cat 7a network cables allow you to set up 4 redundant LANs or realize separate control and media networks. It ensures fast, reliable and fail-safe installation of stage setups. The advantages are obvious: This cable allows you to transmit four times as much data, to realize 4 totally independent networks and, at the same time, a simplified and time-saving setup for events.



max. bandwidth	1000 MHz
Conductor area	0.14 mm ² (AWG 26)
Composition of conductor	7 x 0.16 mm bare copper
Comp. of cores	4 pairs (PimF)
Screen per cable	S/FTP tinned copper braid
Pair Screen	foil (AL/PT)
Overall jacket	PVC
Diameter	17,5 mm
Weight	326 g/m



Cordial GERMANY DATA CATEGORY 7A CCAT 7A QUAD S/FTP 4x4x2x0,14 MM² AWG 26/7 CE (OFC, RoHS)

Cat + Power Hybrid

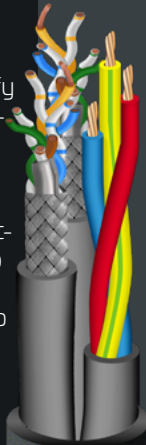
2x Cat 7a + power hybrid

CE 2 P

Mobile stage set-ups should be completed fast and reliably. Hybrid cables help to simplify your set-up and save time. The CE 2 P combines 2 x CCAT 7A LONG-RUN cables, our long distance network cable category Cat 7a (S/FTP double shield, AWG 23/7) and 1 x power cable featuring a 2.5mm² conductor cross-section, both encased in one PVC jacket. The two integrated Cat 7a network cables allow you to double your transmission capacity, set up two redundant LANs or realize separate control and media networks and power the equipment via the integrated power supply cable.



max. bandwidth	1000 MHz	-
Conductor area	0.26 mm ² (AWG 23/7)	2.5 mm ² (AWG 14/50)
Composition of conductor	7 x 0.23 mm bare copper	50 x 0.25 mm bare copper
Comp. of cores	4 pairs twisted	-
Screen	S/FTP tinned copper braid	-
Pair Screen	foil (AL/PT)	-
Overall jacket	PVC	
Diameter	20.8 mm	
Weight	238 g/m	



Cordial GERMANY HYBRID CE2P 2xDATA CAT7A AWG23/7 1xPower 3x2,5 MM²

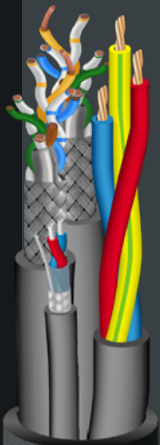
2x Cat 7a + dmx + power hybrid

CE 2 DP

The CE 2 DP combines 2 x CCAT 7A LONG-RUN cables, our long distance network cable category Cat 7a (S/FTP double shielded, AWG 23/7), 1 x AES/EBU DMX cable (110 ohms) and 0.22mm² (AWG 24) conductor cross-section, 1 x power cable featuring 2.5mm² conductor cross-section, all encased in one PVC jacket. The two integrated Cat 7a network cables allow you to double your transmission capacity or set up two redundant LANs or realize separate control and media networks. The DMX cable transmits the data necessary to control the lighting effects, the integrated power cable supplies the equipment with energy.



max. bandwidth	1000 MHz	-	-
Conductor area	0.26 mm ² (AWG 23/7)	0.22 mm ² (AWG 24/7)	2.5 mm ² (AWG 14/50)
Composition of conductor	7 x 0.23 mm bare copper	7 x 0.20 mm bare copper	50 x 0.25 mm bare copper
Comp. of cores	4 pairs twisted	1 pair twisted	-
Screen	S/FTP tinned copper braid	tinned copper braid	-
Pair Screen	foil (AL/PT)	foil (AL/PT) + drain wire	-
Overall jacket	PVC		
Diameter	23.8 mm		
Weight	250 g/m		



DIOL GERMANY HYBRID CE2DP 2xDATA CAT7A AWG23/7 1xDigital 110 Ohm DMX 1xPower 3x2,5 MM²

What does CAT mean?

Especially when it comes to the transmission of high-frequency data signals during productions, event technicians really want to be on the safe side as their absolute priority is to avoid any kind of interference and transmission deficits.

Since 2002, the use of Category 5 twisted pair cables (Cat 5e - specification of suitability for Gigabit Ethernet) has been standard for Gigabit networks and in the course of consistent further technological development Cat 6 and Cat 7 were added.

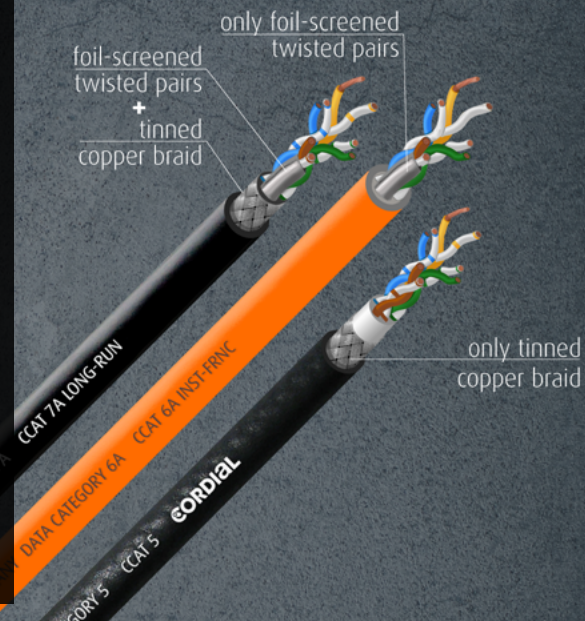
The terms are common – but in what way do these cables actually differ? Well, they significantly differ regarding bandwidth. While Cat 5 cables are designed for operating frequencies of up to 100 megahertz, Cat 6 versions support maximum bandwidth frequencies of up to 500 MHz and Cat 7 cables even of up to 1,000 MHz. What then is decisive for achieving higher operating frequencies together with even better transmission characteristics? In a nutshell: the key words are twisting/stranding or shielding.

Cat 5 cables are Screened Unshielded Twisted Pair (S/UTP) cables, i.e. no shielding on the individual wire pairs, but a braided shield around the entire cable pairs structure. Electro-magnetic interference is reduced by twisted wire pairs.

This is, however, not sufficient enough for higher operating frequencies. Cat 6 cables therefore feature a foil shielding around the wire pairs to protect the cables from interference such as cross talk (FTP = Foiled Twisted Pair).

For Fast Ethernet (FENet = frequency range of 600 or 1,000 MHz), Cat 7 cables come into play. Here all 4 wire pairs are individually surrounded by a foil shield and all of them, additionally, by an overall braided shield.

Cordial offers both, Cat 5e and Cat 7a cables, which were especially designed to meet all the requirements of event technology (bulk and ready-made cables). The Cat 6 bulk cable CCAT 6A INST-FRNC supplements our product range targeting specifically fixed installations equipment (with CPR class Dca compliant with the Building Products Ordinance).



CELEBRATION TIME

high copper cables since 1995

A 25th anniversary is a reason to celebrate and also an occasion to show once again that many years of experience, unfailingly, lead to first -rate results.

Therefore, to pay tribute to our 25th we proudly present our „Edition 25“ cables. They combine all the values Cordial represents and come in three versions: as instrument cables with 2 straight plugs, a version with a right-angled plug and also as XLR microphone cables. And, moreover, the extraordinary acoustic performance is perfectly combined with a visually extremely appealing design.



type: Instrument
conductor area: 0.50 mm²
available lengths: 3, 6, 7.5, 9m

type: Microphone
conductor area: 2x0.34 mm²
available lengths: 5, 10m