



Product Brochure



## About us

Founded in Australia in 2003, Kordz innovates through knowledge and expertise whilst being attentive to the needs of distributors, integrators, and installation partners. We engineer and manufacture professional grade connectivity products designed for systems technicians.

Kordz has become a globally recognised, multi-award-winning specialist cable brand that supports the industry through education and innovative products. Distributed in over 40 countries we partner with global technology leaders.

“Predictable Reliability” is at the core of the Kordz philosophy. The pursuit of this promise drives the innovation of an industry-leading range crafted using a high standard of practical, yet graceful design using advanced manufacturing methods and premium materials.

**Kordz** - Connectivity.Assured

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# Timeline

## 2003

- Kordz founded in Mornington, Australia
- First HDMI Compliance Test Specification (CTS) released

## 2005

- Becomes an official HDMI Adopter company

## 2008

- Establishes first export partnership with Digital World in New Zealand
- Joins CEDIA

- Smarthouse - Winner for Best Cables Range - Master Series

## 2009

- Invited by HDMI Licensing to exhibit at CES as a technology partner

## 2010

- Smarthouse - Winner for Best HDMI Cables - EVX Series
- Established Kordz International in Hong Kong

## 2011

- CEDIA Finalist - Best New Product - HDBaseT™ Extender
- Smarthouse - Winner for Best HDMI Cables - EVX Series

## 2012

- Wins CEDIA's product innovation of the year award

## 2013

- Connected Home Most Popular Award - HDMI Cabling
- CEDIA Award - Best New Product - NEO S3

## 2014

- Connected Home Most Popular Award - HDMI Cabling

## 2015

- Kordz Exhibits at ISE and enters the European market
- Launched B.2 HDBaseT™ certified extender – slimmest HDBaseT™ commercial grade (24/7 operation) extender in the world at 16mm high
- Established Kordz Europe Ltd in UK

## 2016

- 1st European distributors appointed
- Future Ready Solutions appointed US Master Distributor

## 2017

- Kordz Partners with DPL Labs
- Hybrid Fibre (AOC) HDMI cable launched

## 2018

- Now exporting to over 29 different countries around the world
- Connected Home Most Popular Award - HDMI Cabling
- Joins AVIXA

## 2019

- Connected Home Most Popular Award - HDMI Cabling
- PRO series Cat 6 patch cords released

## 2020

- Individually tested PRS series Cat6a patch cords released
- Connected Home Most Popular Award - HDMI Cabling

## 2021

- Ultra High Speed BRAVO HDMI cables released
- Connected Home Most Popular Award - HDMI Cabling
- 1st patent granted for PRO and PRS patch cables



# ONE Series - HDMI Cable

# ONE

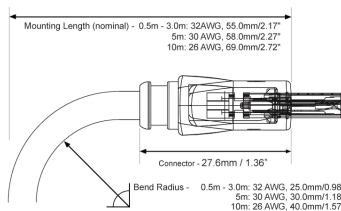
- 0.5m
- 1.0m
- 2.0m
- 3.0m
- 5.0m
- 10m

## BULK PACKAGED HDMI CABLE

Our **ONE series** HDMI is flexible, compact and certified for your HDMI plug and play requirements. Each cable is individually tested as part of our strict production process, giving us the confidence to offer you our Lifetime Guarantee.

- Engineered and constructed to ensure installation success and ease
- High Speed with Ethernet in lengths to 3m (9'10") for 2160p (4K) support
- Standard with Ethernet with operational support to 1080p/60 up to 10m (32'9")
- Induction soldered pin transitions for benchmark inter-terminal uniformity
- PVC boot shell assembly with folded nickel plated HDMI connector
- 100% of units tested on the production line for electrical continuity on all pins, with 1080p/60 application test
- Lifetime Warranty

- 4K UP TO 3M
- 10.2 Gbps
- 4.56 Gbps
- ARC
- 3D
- HEAC
- 4K 24 4:4:4 UP TO 3M
- 1080p 60 UP TO 10M
- LIFETIME WARRANTY



# PRO Series - HDMI Cable

# PRO

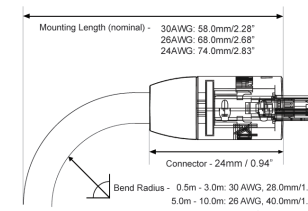
- 0.5m
- 1.0m
- 1.5m
- 2.0m
- 3.0m
- 5.0m
- 7.5m
- 10m
- 12.5m
- 15m
- 20m

## GENERAL APPLICAtION HDMI CABLE

Our **PRO series** HDMI cable is engineered to make installations easier. This is achieved through a combination of solid copper pins, 1kg retention connectors and a highly flexible fire rated jacket. Available in lengths from 0.5m to 20m, the PRO series HDMI cable reliably delivers 4K resolutions and Ethernet to TV displays.

- Engineered and constructed to ensure installation success and longevity
- High Speed with Ethernet in lengths to 5m (16'4") for 2160p (4K) support
- Standard with Ethernet with operational support to 1080p/60 up to 20m (65ft)
- Induction soldered pin transitions for benchmark inter-terminal uniformity
- ABS + PVC boot shell assembly with folded gold plated HDMI connector
- 100% of units tested on the production line for electrical continuity on all pins, with full Bit Error Rate (BER) application test
- UL CMG fire rated in all lengths
- Lifetime Warranty

- 4K UP TO 5M
- 10.2 Gbps
- ARC
- 3D
- HEAC
- 1KG RETENTION
- 4K 24 4:4:4 UP TO 5M
- 1080p 60 UP TO 20M
- LIFETIME WARRANTY





# PRO<sup>3</sup> Series - Passive 18Gbps HDMI Cable

# PRO<sup>3</sup>

- 0.5m
- 1.0m
- 1.5m
- 2.0m
- 3.0m
- 4.0m
- 5.0m

## PASSIVE 18GBPS HDMI CABLE

The Kordz **PRO<sup>3</sup>** Passive HDMI Cables exceed the standards of performance and flexibility to deliver 18Gbps 4K resolution. Fully shielded high quality ABS shells and with 1Kg connectors provide resilience in demanding applications where a cost- effective, reliable solution is required. Fit Kordz PRO3 Passive HDMI Cables with confidence, backed by the Kordz Lifetime Guarantee.

- A solid 1Kg grip, ensuring connectors stay in place for as long as required
- A compact 18mm wide ABS headshell for easy installation
- Reinforced internals for superior flexibility and pull strength during installation
- A lightweight and UL CMG fire rated jacket for safety
- No external power dependencies, it works like a normal passive HDMI cable
- High contrast detailed labelling with inventory management design



# PRO<sup>3</sup> - Active Copper 18Gbps - HDMI Cable

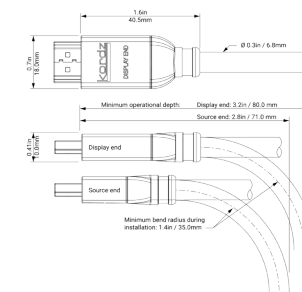
# PRO<sup>3</sup>

- 7.5m
- 10m
- 12.5m

## ACTIVE COPPER 18GBPS HDMI CABLE

The Kordz **PRO<sup>3</sup>** Active Copper HDMI Cables exceed the standards of performance and flexibility, delivering 18Gbps 4K resolution over long distances and optimised through Active Copper Technology. Fully shielded high quality ABS shells and with 1Kg connectors provide resilience in demanding applications where a cost- effective, reliable solution is required. Fit Kordz PRO3 Active Copper HDMI Cables with confidence, backed by the Kordz warranty.

- A solid 1Kg grip, ensuring connectors stay in place for as long as required
- A compact 18mm wide ABS headshell for easy installation
- Reinforced internals for superior flexibility and pull strength during installation
- A lightweight and UL CMG fire rated jacket for safety
- No external power dependencies, it works like a normal passive HDMI cable
- 18Gbps certification from DPL Labs
- High contrast detailed labelling with inventory management design
- Backed by the Kordz 2 Year Warranty



# PRO<sup>3</sup> - Active Optical 18Gbps - HDMI Cable

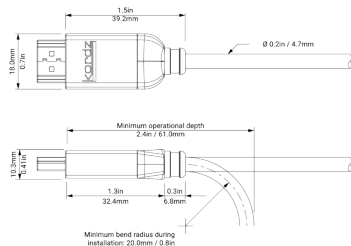
# PRO<sup>3</sup>

10m 15m 20m

## PASSIVE 18GBPS HDMI CABLE

The Kordz **PRO<sup>3</sup>** Active Optical HDMI Cables exceed the standards of performance and flexibility, delivering 18Gbps 4K resolution over long distances and optimised through Active Optical Technology. Fully shielded high quality ABS shells and with 1Kg connectors provide resilience in demanding applications where a cost-effective, reliable solution is required. Fit Kordz PRO3 Active Optical HDMI Cables with confidence, backed by the Kordz warranty.

- A solid 1Kg grip, ensuring connectors stay in place for as long as required
- A compact 18mm wide ABS headshell for easy installation
- Reinforced internals for superior flexibility and pull strength during installation
- A lightweight and UL CMG fire rated jacket for safety
- No external power dependencies, it works like a normal passive HDMI cable
- 18Gbps certification from DPL Labs
- High contrast detailed labelling with inventory management design
- Backed by the Kordz 2 Year Warranty



# PRS<sup>4</sup> - Passive - HDMI Cable

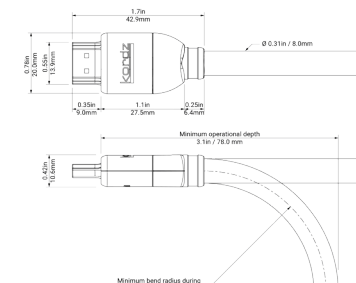
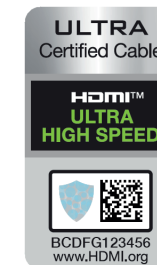
# PRS<sup>4</sup>

0.5m 1.0m 1.5m 2.0m 3.0m 5.0m

## 48Gbps PASSIVE HDMI CABLE

The Kordz **PRS<sup>4</sup>** Passive HDMI Cables are designed to meet the high demands and rigour of professional integration. The Kordz PRS4 range features cables that are compact, tough and flexible with a 2Kg retention force die-cast connector. Kordz PRS4 HDMI Passive Cables support the full features and benefits of the latest HDMI technology when using 4K HFR or 8K devices.

- Ultra High Speed certified
- 48Gbps support for 8K/10K, HDR, VRR, HFR, 3D, FRL
- Robust engineering and construction with premium materials
- 15µ" gold-plated solid copper pins
- Compact connector with full internal zinc-alloy diecast housing
- Easy installation aided by the unique Kordz shark-nose dust-cap
- Convenient easy tear bulk packaging minimising waste on site
- UL CMG rating
- Installer friendly packaging
- High contrast detailed labelling with inventory management design
- Backed by the Kordz Lifetime Guarantee



# PRS<sup>4</sup> - Active Optical Cable (AOC) - 7.5m - 20m

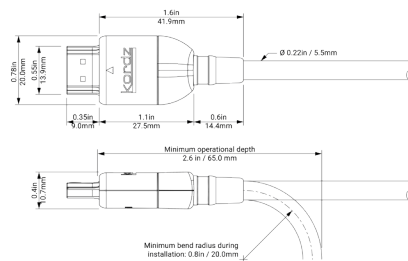
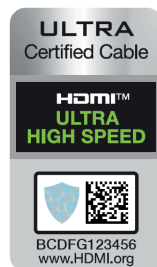
# PRS<sup>4</sup>

10m 15m 20m

## 48Gbps ACTIVE OPTICAL HDMI CABLE

The Kordz **PRS<sup>4</sup>** Active HDMI Cable are designed to meet the high demands and rigour of professional integration. The Kordz PRS4 range features cables that are compact, tough and flexible with a 2Kg retention force die-cast connector. Kordz PRS4 HDMI Active Optical Cables support the full features and benefits of the latest HDMI technology when using 4K HFR or 8K devices.

- Ultra High Speed certified
- 48Gbps support for 8K/10K, HDR, VRR, HFR, 3D, FRL
- Robust engineering and construction with premium materials
- 15µ" gold-plated solid copper pins
- Compact connector with full internal zinc-alloy diecast housing
- Easy installation aided by the unique Kordz shark-nose dust-cap
- Convenient easy tear bulk packaging minimising waste on site
- Low Smoke Zero Halogen Construction
- Backed by the Kordz 2 Year Warranty



# R.3 - HDMI Cable

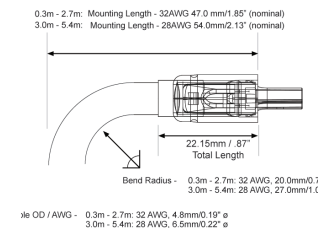
# R.3

0.3m 0.6m 0.9m 1.2m 1.5m 1.8m 2.1m  
2.4m 2.7m 3.0m 3.6m 4.2m 4.8m 5.4m

## RACK INSTALLATION HDMI CABLE

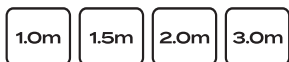
Our **R.3** HDMI cable is designed for critical AV applications. Increased conductor shielding, 2kg retention connectors and flexible lengths make the R.3 HDMI cable perfect for 19" rack installations. This unique combination of advanced features delivers unrivalled installation performance and reliability. Available in lengths from 0.3m to 5.4m.

- Engineered and built to deliver maximum commercial up-time
- 0.3 - 3.0m lengths in 0.3m increments for precision rack fit
- 3.6 - 5.4m lengths in 0.6m increments
- High bandwidth solid OFC conductors
- Induction soldered pin transitions for benchmark inter-terminal uniformity
- Anti-fatigue Die-cast Zn alloy connectors tested to ≥1,000 cycles & 2kg retention force
- 100% of units tested for zero Bit Error Rate (BER) @ 340Mcsc, <0.05% in-field failure rate
- Halogen-free construction
- DPL Certified 4K 18G-DC
- Lifetime Warranty



# BRAVO - 8K Performance HDMI Cables

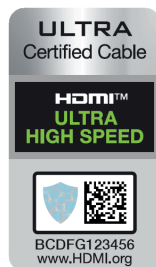
# Bravo



## 8K PERFORMANCE HDMI CABLES

Our **Bravo** HDMI cables are the latest release to meet the new HDMI specification standard. Kordz Bravo HDMI cables have a compact design, flexibility and provide the performance needed to support the video standards of 4K/120fps UHD, 5K Wide, 8K & 10K Wide. Bravo will also support up to 32 channels of audio including Dolby Atmos, Auro3D and DTS:X immerse audio formats.

- Compact design
- Flexible
- Supports immersive audio up to 32 channels
- Newly designed anodized head shell
- Die-cast gold plated connector and contacts with a 2kg retention force
- 100% of units tested on the production line for electrical continuity on all pins, with full Bit Error Rate (BER) application test



# EVS Series - Audio / Videophile HDMI Cables

# EVS



## AUDIO / VIDEOPHILE HDMI CABLES

The **EVS-R** HDMI cable has larger 28AWG solid conductors to provide generous bandwidth headroom to ensure compatibility with the latest 4K 18Gbps video resolutions. The conductors are silver plated (2%) to maximise the skin effect and signal integrity. Available in lengths of 0.6m - 5m.

- Solid 28AWG conductors
- Solid core copper, silver plated TMDs channels (2% by volume)
- Superior uncompressed HD/PCM audio
- Halogen-free cable jacket and larger strain relief
- World class low jitter IR induction soldered connectors
- 2kg retention force die-cast connectors



## EVO Series - Audio / Videophile HDMI Cables

# EVO



### AUDIO / VIDEOPHILE HDMI CABLES

Our **EVO-R series** HDMI cable delivers unrivalled 4K video performance. Superior materials and induction soldering enable us to guarantee the ultimate signal integrity. The compact construction and ultra light weight connector offer 360° fit-anywhere installation versatility. Available in lengths from 0.6m to 3m.

- 4K 60Hz 4:4:4 for lengths to 2.4m and 4K 60Hz 4:2:0 to 3m
- Solid 32AWG OFC conductors in twisted pair array
- Premium 24k Gold plated Die-cast connector
- 15µ" gold plated induction terminated contacts
- Halogen-free cable jacket and strain relief
- Identified by Green cable stripe



## PRO Series - 8K 32.4Gbps DisplayPort™ Cables

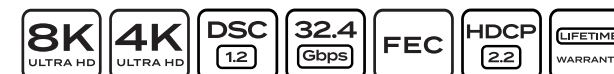
# PRO



### DISPLAYPORT™ 8K

Our **PRO series** DisplayPort™ cable is engineered to make installations easier. This is achieved through a combination of solid copper pins and a highly flexible fire rated jacket. Available in lengths from 1m to 5m, the PRO series DisplayPort™ cable reliably delivers up to 8K resolutions from compatible sources to displays.

- Engineered and constructed to ensure installation success and longevity
- DisplayPort™ 1.4 offers backwards compatibility with earlier DisplayPort™ standards
- Supports high resolution displays up to 8K 7680 x 4320@60Hz DSC1.2
- Supports High Bit Rate 3 (HBR3) mode with data rate up to 32.4Gbps
- Supports Display Stream Compression (DSC) 1.2
- Forward Error Correction (FEC)
- Supports Expanded Audio Transport - up to 32 audio channels
- 1536kHz audio sample rate, and inclusion of all standard audio formats





## PRO Series - TOSLink Cable

# PRO

0.5m	1.0m	1.5m	2.0m	3.0m	5.0m
7.5m	10m	12.5m	15m	20m	

### THE PRO SERIES TOSLink

Our **PRO series** TOSLink cable is a highly flexible optical fibre solution ideal for professional AV installations. Available in lengths from 0.5m to 20m the PRO TOSLink cable features a secure click fit connector and polyfibre conductor for an optimised digital audio transmission.

- Tight tolerance for secure connection
- Shallow mounting depth connectors
- 1mm polyfibre with polished ends
- Flexible and durable matte black PVC jacket



## PRO Series - Integrator Audio / Video Cable

# PRO

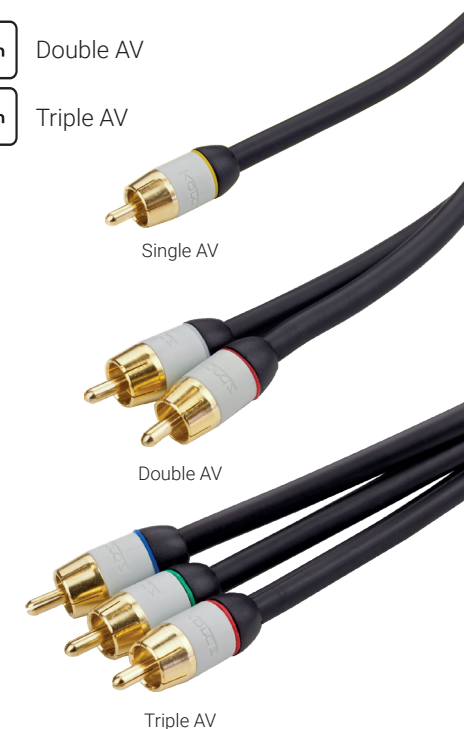
0.5m	1.0m	1.5m	2.0m	3.0m	5.0m	Single AV		
0.5m	1.0m	1.5m	2.0m	3.0m	5.0m	10m	15m	Double AV
0.5m	1.0m	1.5m	2.0m	3.0m	5.0m	10m	15m	Triple AV

### INTEGRATOR AUDIO / VIDEO CABLE

Our **PRO series** AV RCA cables are designed for the custom installer to provide a solution that just works. Installers will appreciate the compact RCA connectors using the micro-shell technology which is amongst the world's smallest RCA shells.

The matte black PVC jacket is flexible and durable, suitable for both installation in-wall or to remain unobtrusively behind equipment.

- Purpose designed commercial grade
- Shallow mounting depth connectors
- 75 Ω coaxial cable
- 24AWG stranded oxygen free copper conductor
- Double Shielded with 6mmØ cable jacket
- Designed for S/PDIF, CV, Mono
- Channel ID rings included
- Flexible and durable matte black PVC jacket



## PLX - HDB.2 HDMI HDBaseT™ Extender

# PLX

### PLX-HDB.2 HDBaseT™ HDMI EXTENDER

Our **PLX-HDB.2** HDBaseT™ extender delivers 4K HDMI, IR, RS-232 over a single Cat6 cable. The product supports 1080p resolutions up to 70m and 4K 60Hz 4:2:0 up lengths of 40m.

- Supports Catx UTP/FTP/STP cable
- 4K UHD to 40m
- 1080p/60 to 70m
- Supports HDMI 1.4 UHD60 8-bit 4:2:0
- Supports HDMI 1.4 UHD30 up to 12-bit 4:2:2, & 8-bit 4:4:4/sRGB
- HDCP 2.2 compatible
- HDBaseT™ certified
- HDBaseT™ Lite VS010 architecture
- IR & RS-232 Control



## PLX - HDB.3 18Gbps HDMI HDBaseT™ Extender

# PLX

### PLX-HDB.3 HDBaseT™ HDMI EXTENDER

Our **PLX-HDB.3** HDBaseT™ extender delivers 4K HDMI, IR, RS-232 and PoC over a single Cat6 cable. The product supports 1080p resolutions up to 70m and 4K 60Hz 4:4:4 up lengths of 40m.

- TX and RX are 16mm thin with all connectors on one side
- Ideal for mounting in tight spaces
- Supports Catx UTP/FTP/STP cable
- 4K60UHD 4:4:4 (18Gbps) to 40m
- 1080p/60 to 70m
- Supports HDMI 2.0 4K60UHD 8-bit colour depth 4:4:4
- Supports HDMI 1.4 4K24UHD HDR 10 colour depth 4:4:4



## ONE Series - Speaker Cable

# ONE

### BULK SPEAKER CABLE

Our **ONE series** speaker cable has been designed and engineered to meet the highest industry standards for AV installation. The Rapid-EZ Reel pro box packaging allows the easy flow of cable from the box, whilst also keeping the cable from twisting and curling, minimising snags during installation and saving time.

- Engineered and constructed to ensure installation success and ease
- 99.99% Oxygen Free Copper (OFC)
- Low Smoke Zero Halogen (LSZH) construction
- Easy glide Yellow, Purple or Black outer jacket
- Supplied in the durable Rapid-EZ-Reel packaging – \*152.5m (500ft) or \*305m (1,000ft)  
\*depends on cable gauge & configuration
- Metre Marked
- Easy strip internal nylon rip cord
- Available in 2 x 12AWG, 2 x 14AWG, 4 x 14AWG, 2 x 16AWG and 4 x 16AWG
- CPR Declared Performance: Eca (EN 50575:2014+A1:2016)
- Industry standard wire colour coding (Red, Black, Green, White)



## ONE Series - Bulk Speaker Cable Banana Plugs

# ONE

### BULK SPEAKER CABLE BANANA PLUGS

Our **ONE series** 24k gold plated banana plug delivers an enhanced connection for improved signal transfer, safety and reliability. The plug is designed to fit all standard 4mm banana sockets on amplifiers and speakers. Each plug is engineered for ease of installation and colour coded for identification.

- Rear cable entry 4mm banana plug
- 24k gold plated body
- Offset oversized grub screws for superior cable termination
- Accepts up to 10AWG stranded speaker cable
- Moulded plastic backshells eliminates the risk of speaker terminal shorts
- Economy and performance
- Available in bulk trays of 20 plugs for each colour
- Lifetime Warranty



## ONE Series - Cat6 U/UTP Cable

# ONE

### Cat6 U/UTP CABLE

Our **ONE series** Cat6 cable has been designed and engineered to exceed the bandwidth requirements of 4K video installations. Tested and approved to exceed 550Mhz, the ONE series Cat6 cable is HDBaseT™ recommended. Supplied in a 305m professional pull box, the Rapid-EZ reel allows the easy flow of cable from the box, whilst also keeping the cable from twisting and curling, minimising snags during installation and saving time.

- Suitable for 10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX (Gigabit) & 5GBASE-T, PoE, PoE+ & PoE++
- U/UTP Ethernet Cat6
- Four Twisted Pairs 24AWG Oxygen Free Solid Copper Conductors
- PVC Separator Reduces Crosstalk Between Pairs
- Suitable for IDC Terminations
- Supplied In The Durable Rapid-EZ-Reel Packaging - 305m (1,000ft)
- Metre Marked
- 5 Colours Available: Blue, Green, White, Yellow & Purple
- Exceeds ANSI/TIA 568C-2.1 Standard
- Available In LSZH - IEC60332-1 And UL 444 CM fire rated versions
- CPR Declared Performance: ONE-Cat6: Dca-s2, d2, a1 (EN 50575:2014+A1:2016)



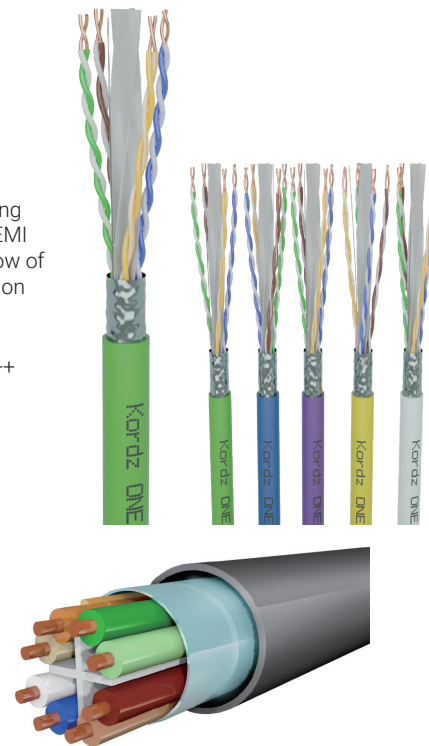
## ONE Series - Cat6A F/UTP Cable

# ONE

### Cat6A F/UTP CABLE

Our **ONE series** Cat6A cable has been designed and engineered to exceed the bandwidth requirements of 4K video installations. This premium shielded, twisted pair (F/UTP) cable with grounding, provides industry-leading protection required in complex systems from external cable noise sources, also known as alien crosstalk or EMI (electromagnetic interference). Supplied in a 305m professional pull box, the Rapid-EZ reel allows the easy flow of cable from the box, whilst also keeping the cable from twisting and curling, minimising snags during installation and saving time.

- Suitable for 10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX (Gigabit) & 10GBASE-T, PoE, PoE+ & PoE++
- F/UTP Ethernet Cat6A
- Four Twisted Pairs 23AWG Solid Copper Conductors
- PVC Separator Reduces Crosstalk Between Pairs
- Mylar laminated aluminium tape shielding with a 26AWG drain wire
- Suitable for IDC Terminations
- Supplied in the durable Rapid-EZ-Reel packaging - 152.5m (500ft)
- Metre Marked
- 5 Colours Available: Blue, Green, White, Yellow & Purple
- Exceeds ANSI/TIA 568-C.2 and ISO/IEC 61156-5 standards
- Available In LSZH - IEC60332-3-25 and UL 444 CM fire rated versions
- CPR Declared Performance: ONE-Cat6A: Dca-s1, d2, a1 (EN 50575:2014+A1:2016)

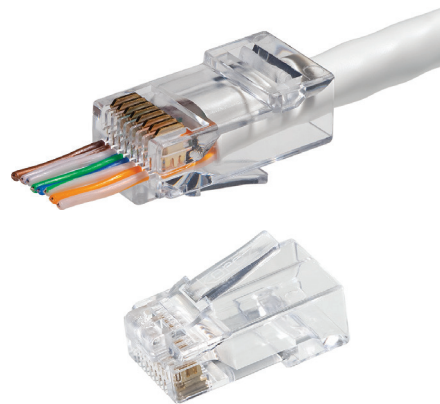


# ONE Series - Cat6 Termination Connector & Strain Reliefs

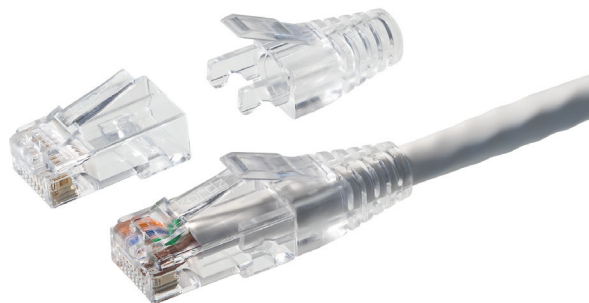
# ONE

## RJ45 Cat6 PUSH-THROUGH SITE TERMINATION CONNECTORS & STRAIN RELIEFS

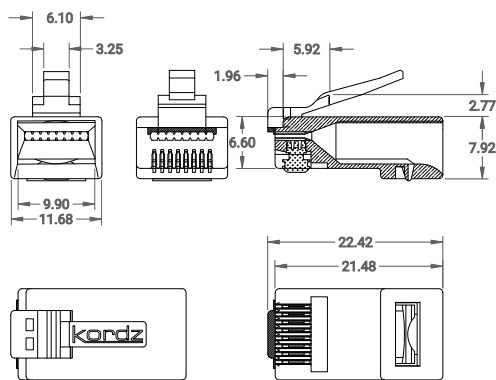
Our **ONE series** Cat6 RJ45 field termination connectors are engineered to make AV installations easier. The One series RJ45 connectors work with both solid and stranded unshielded 24AWG category cables. The larger cable entry reduces the distance between the wires and contacts, ensuring optimal performance and reliability.



Strain relief sold separately, available in jars of 100 pcs.



Tool required:  
Part #ONE-RJ45TOOL1

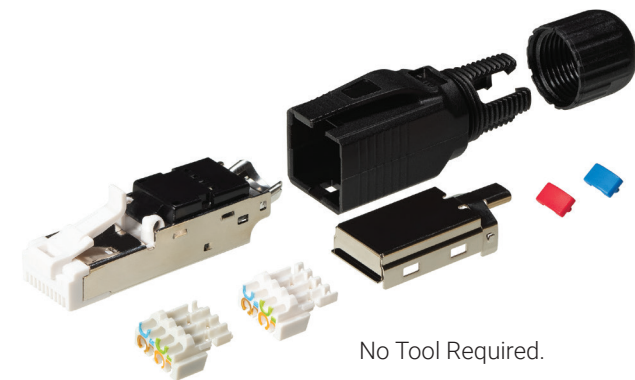
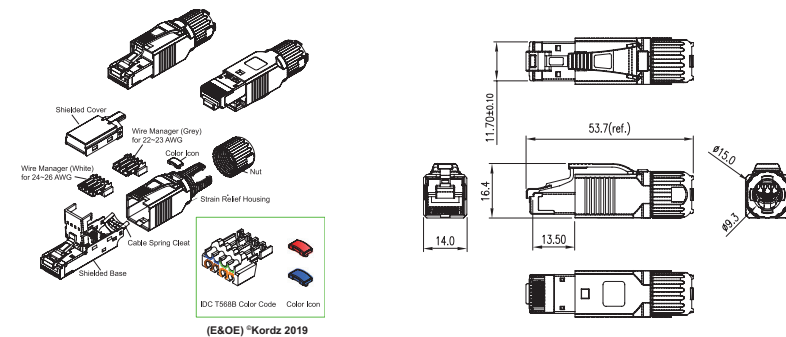


# ONE Series - Cat6A Shielded Field Termination Connectors

# ONE

## RJ45 Cat6A SHIELDED FIELD TERMINATION CONNECTORS

Our **ONE series** Cat 6A field connector delivers an advanced toolless termination solution for use on high performance AV installations. The connector is IP20 rated and has 360° shielding for greater protection against electro-magnetic interference.



No Tool Required.



## PRO - Keystone RJ45 Socket

# PRO

### RJ45 Cat6A SHIELDED FIELD TERMINATION SOCKET

The Keystone RJ45 Sockets perfectly complement Kordz ONE Series Bulk Category Cabling and gives the professional integrator total confidence to deliver an end-to-end cabling solution. Featuring an ABS clamshell with a metal latching mechanism the Keystone RJ45 Sockets are very easy to fit. Match them with Kordz PRS Patch Cords for a complete Kordz ecosystem that delivers 'Connectivity Assured'.

- ABS clamshell design
- Available in black or white
- Easy to terminate with latching mechanism
- 6 pieces per pack
- Sturdy and robust construction
- Manufactured with quality materials and using advanced manufacturing methods
- Available in black and white variants
- Backed by the Kordz Lifetime Guarantee



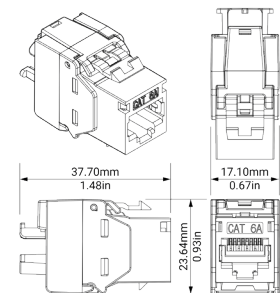
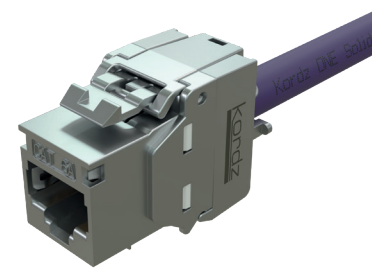
## PRS - Keystone RJ45 Socket

# PRS

### RJ45 Cat6A SHIELDED FIELD TERMINATION SOCKET

The Kordz Category Cabling Components range allows professional integrators total confidence with an end-to-end cabling solution. The Keystone RJ45 Sockets perfectly complement Kordz ONE Series Bulk Category Cabling. Featuring a die-cast metal clamshell design and a latching mechanism the Keystone RJ45 Sockets are very easy to fit. Match them with Kordz PRO Patch Cords for a complete Kordz ecosystem that delivers 'Connectivity Assured'.

- Die-cast metal clamshell design
- Easy to terminate with latching mechanism
- 6 pieces per pack
- Sturdy and robust shielded construction
- Manufactured with quality materials and using advanced manufacturing methods
- Backed by the Kordz Lifetime Guarantee



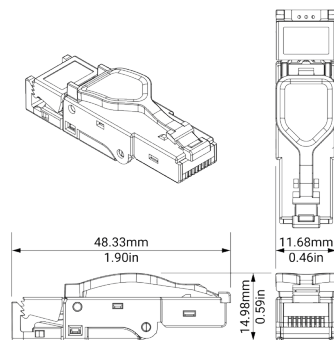
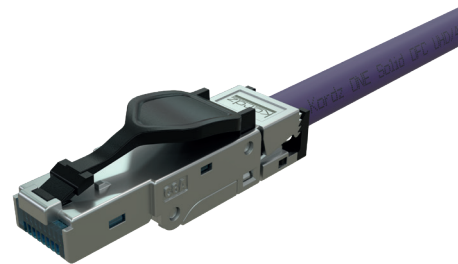
## PRS - Field Termination RJ45 Plug

# PRS

### RJ45 Cat6A SHIELDED FIELD TERMINATION PLUG

The Field Termination RJ45 Plugs perfectly complement Kordz ONE Series Bulk Category Cabling and gives the professional integrator total confidence to deliver an end-to-end cabling solution. Featuring a die-cast alligator style design and advanced manufacturing methods, you can match them with Kordz PRS Patch Cords for a complete Kordz ecosystem that delivers 'Connectivity Assured'.

- Die-cast alligator style design
- Easy to terminate
- 6 pieces per pack
- Sturdy and robust shielded construction
- Manufactured with quality materials using advanced manufacturing methods
- Backed by the Kordz Lifetime Guarantee



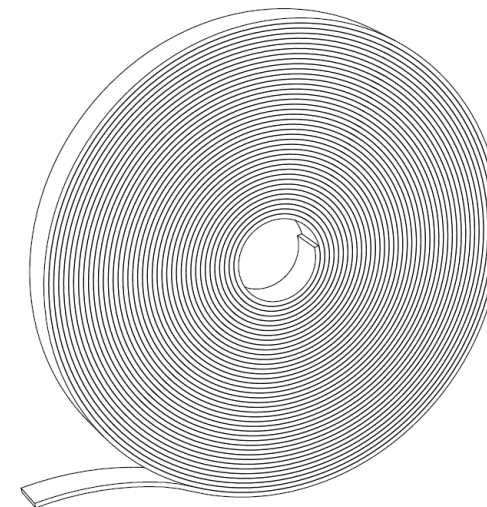
## PRO - Hook and Loop

# PRO

### PROFESSIONAL GRADE HOOK AND LOOP

The Kordz Pro Hook and Loop is supplied in a 10m continuous length allowing the installer to create custom cable ties. Using this soft fluff free hook and loop makes it easier than ever to dress cables for a complete Kordz ecosystem with 'Connectivity Assured'.

- Premium soft finish
- High adhesion without the fluff
- 12.5mm width
- Cut to length reel for convenience
- 10m length in resealable foil bag
- 1kg adhesion for each cm of overlap



Width: 12.5mm / 0.5in  
Length: 10.0m / 32.8ft

**Black**



## PRO Series - Cat6 Patch Cords

# PRO

0.15m	0.25m	0.5m	0.75m	1.0m	1.5m	2.0m	2.5m
3.0m	4.0m	5.0m	7.5m	10m	15m	20m	30m

### Cat6 PATCH CORD

Our **PRO series** Cat6 Network Patch Cord is a highly flexible, slim-profile, stranded 28AWG copper patch cord ideal for professional AV installations. Available in lengths from 0.15m to 30m the PRO patch cord features our custom designed compact RJ45 connector providing an almost unbreakable locking latch.

- Suitable for 10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX (Gigabit) & 10GBASE-T, PoE, PoE+ & PoE++
- Engineered and constructed to ensure installation success and longevity
- Exceeds all Category 6 ANSI/TIA 568.2-D standards for all frequencies from 1 to 250 MHz
- UTP 28AWG Cat6 slim-profile network patch cord
- UL (CM) fire rating
- 568B wire connection configuration
- Overall diameter of 3.9mmØ
- New compact design connector with 2000 bend cycle lock tab
- Available in 7 Colours – Black, Blue, Grey, Green, Yellow, Red & White
- Available in lengths from 0.15m to 30.0m lengths
- Patent pending design



## PRS Series - Cat6A Patch Cords

# PRS

0.15m	0.25m	0.5m	0.75m	1.0m	1.5m	2.0m	2.5m
3.0m	4.0m	5.0m	7.5m	10m	15m	20m	30m

### SLIM PROFILE Cat6A U/FTP NETWORK PATCH CORD

Our **PRS series** Cat6A Network Patch Cord is a 10Gbps, slim-profile, 28AWG copper patch cord designed for high-bandwidth AV installations. Available in lengths from 0.15m to 30m the PRS patch cord features our custom designed compact RJ45 connector providing an almost unbreakable latching tab.

- Exceeds all Category 6A ANSI/TIA 568.2-D standards for all frequencies from 1 to 550 MHz
- 28AWG stranded U/FTP Category 6A shielded slim-profile network patch cord
- Each cable up to 10m is individually component tested with its own serialised test report
- Anti-corrosion gold-plated shielded connector
- Suitable for 10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX (Gigabit) & 10GBASE-T, PoE, PoE+ & PoE++
- UL (CM) fire rating
- 568B wire connection configuration
- Overall diameter of 4.8mmØ
- World's smallest minimal operational depth and most flexible Cat6A U/FTP patch cord
- Available in 7 Colours – Black, Blue, Grey, Green, Yellow, Red & White
- Patent pending design



## ONE CTRL - KNX Cable

# ONE

### KNX CABLE CERTIFIED 2 PAIR CABLE

The Kordz One CTRL KNX cable is designed and engineered to meet the exacting requirements of the KNX certification. This professional grade high performance cable designed for systems technicians is supplied in a 305m professional pull box. The Rapid-EZ reel allows the easy flow of cable from the box, whilst also keeping the cable from twisting and curling, minimising snags during installation and saving time.

- Easy glide outer jacket with meter marks
- Compact Rapid-EZ-Reel packaging
- CPR Dca Fire-rated jacket - LSZH
- Enhance Pair Geometry with Al - Mylar Shield
- KNX Certified: 579/1721/20
- Sturdy and robust shielded construction
- Manufactured with quality materials using advanced manufacturing methods
- Backed by the Kordz Lifetime Guarantee



## Professional grade cabling products designed for systems technicians.

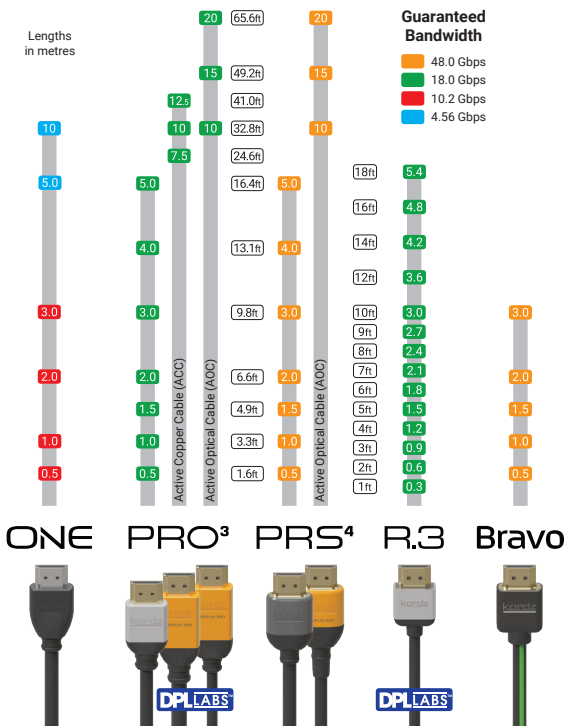
Kordz is a globally recognised, multi-award-winning specialist cable brand. Committed to a high standard of practical, graceful design and manufacturing, we strive for Predictable Reliability, a core concept and experience in our industry-leading products. We are proud to work closely with distributors, integrators and installation partners worldwide.

Discover more about Kordz

[www.kordz.com](http://www.kordz.com)



# HDMI - Cable Guide



# 8K - Bandwidth Guide

All lengths in metres

**Guaranteed Bandwidth**

- 32.4 Gbps (Blue)
- 48.0 Gbps (Orange)

**Bravo HDMI PRO DisplayPort**

HDMI 2.1 supports legacy TMDS mode and introduces Fixed Rate Link (FRL) mode which uses 3 Lanes operating at 3 or 6Gbps (max 18Gbps) or 4 Lanes at 6, 8, 10 or 12 Gbps (max 48Gbps). Bandwidth and optional DSC compression allow for a wide range of 4K, 5K Wide, 8K and 10K Wide resolutions, 8, 10 & 12 bit colour depths and frame rates up to 120fps. New Category 3 HDMI cables will be required to support all 2.1 features.

DisplayPort 1.4 uses the transmission mode HBR3 (32.4 Gbit/s) as introduced in version 1.2 and is still the highest available mode. DisplayPort 1.4 adds support for 4K, 5K & 8K resolutions with frame rates up to 240fps. Display Stream Compression 1.2 (DSC), Forward Error Correction, 8, 10 & 12 bit colour space including static and dynamic HDR. It also includes Rec.2020 colour space for HDMI interoperability. Audio capabilities extend to a maximum number of 32 audio channels.

D:\M\EN\202001

	Resolution	Frame Rate	Color depth (bits)	Chroma Subsampling	HDMI Certified Test Specification	Data Rate (Gbps)
HD*	1920 x 1080p	24	8-bit	4:2:0 / 4:2:2	Standard with Ethernet	2.22
		60	8-bit	4:4:4 / 4:2:0 / 4:2:2		4.45
HD*	1920 x 1080p	120	8-bit	4:4:4 / 4:2:0 / 4:2:2		8.91
		24	8-bit, HDR10 or 12	4:2:0 / 4:2:2	High Speed with Ethernet	8.91
4K*	3840 x 2160p	24	8-bit	4:4:4 / RGB		8.91
		60	8-bit	4:2:0		8.91
		24	HDR12	4:4:4 / RGB	High Speed** with Ethernet	11.14
4K†	3840 x 2160p	24	HDR10	4:2:0		11.14
		60	HDR12	4:2:2		17.82
		60	8-bit	4:4:4 / RGB		20.05
4K‡	3840 x 2160p	60	HDR10	4:4:4 / RGB		24.06
			HDR12	4:4:4 / RGB		32.08
		100 / 120	8-bit, HDR10 or 12	4:2:0 / 4:2:2	Ultra High Speed	32.08
			8-bit	4:4:4 / RGB		40.10
		48 / 60	HDR10	4:4:4 / RGB		48.11
			8-bit, HDR10 or 12	4:2:0 / 4:2:2		20.05
5K‡	5120 x 2160p	48 / 60	HDR10	4:4:4 / RGB	Ultra High Speed	25.06
			HDR12	4:2:0 / 4:2:2		30.07
		100 / 120	8-bit	4:4:4 / RGB		40.10
			HDR10	4:4:4 / RGB	Ultra + DSC	50.12
		24 / 30	HDR12	4:2:0		60.14
			8-bit	4:2:0 / 4:2:2		17.82
8K‡	7680 x 4320p	48 / 60	HDR10 or 12	4:2:0 / 4:2:2	Ultra High Speed	32.08
			HDR12	4:4:4 / RGB		40.10
		100 / 120	HDR10	4:4:4 / RGB		48.11
			HDR12	4:2:0	Ultra + DSC	80.19
		24 / 30	HDR10 or 12	4:2:0 / 4:2:2	Ultra High Speed	96.23
			HDR12	4:4:4 / RGB		128.30
10K‡	10240 x 4320p	48 / 60	HDR10 or 12	4:2:0 / 4:2:2	Ultra + DSC	40.10
			HDR12	4:4:4 / RGB		48.11
		100 / 120	HDR10	4:4:4 / RGB		60.10
			HDR12	4:2:0	Ultra + DSC	80.19
		24 / 30	HDR10 or 12	4:2:0 / 4:2:2	Ultra High Speed	100.24
			HDR12	4:4:4 / RGB		120.29

\* HDMI 1.4 - 2009 † HDMI 2.0 - 2013 ‡ HDMI 2.1 - 2019  
 \*\* Although High Speed HDMI CTS is 10.2Gbps, Kordz guarantees 18Gbps for products indicated in green on reverse side of this card.  
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HDMI	Resolution	Frame Rate	Color depth (bits)	Chroma Subsampling	Speed	Data Rate (Gbps)
HDMI 2.1 - 2019-2020	4K	60	HDR10	4:4:4/RGB	Ultra High Speed	20.05
			HDR12	4:2:0/4:2:2		24.06
			8-bit	4:4:4/RGB		32.08
		100/120	HDR10 or 12	4:2:0/4:2:2		32.08
			8-bit	4:4:4/RGB		40.10
			HDR12	4:4:4/RGB		48.11
	5K	48/60	HDR10 or 12	4:2:0/4:2:2	Ultra High Speed	20.05
			8-bit	4:4:4/RGB		20.05
			HDR10	4:4:4/RGB		25.06
		100/120	HDR12	4:2:0/4:2:2		30.07
			8-bit, HDR10 or 12	4:2:0/4:2:2		40.10
			HDR10	4:4:4/RGB		40.10
HDMI 2.1 - 2019-2020	8K	24/30	HDR10 or 12	4:2:0/4:2:2	Ultra High Speed	17.82
			HDR12	4:4:4/RGB		32.08
			8-bit	4:2:0		40.10
		48/60	HDR10	4:4:4/RGB		40.10
			HDR12	4:2:0		48.11
			HDR10 or 12	4:2:0/4:2:2		64.15
	100/120	HDR10	4:4:4/RGB	80.19		
		HDR12	4:2:0	96.23		
		8-bit, HDR10 or 12	4:2:0/4:2:2	128.30		
	10K	48/60	HDR10 or 12	4:2:0/4:2:2	Ultra + DSC	40.10
			HDR12	4:4:4/RGB		50.12
			HDR10	4:4:4/RGB		60.10
100/120		HDR12	4:2:0	80.19		
		HDR10 or 12	4:2:0/4:2:2	100.24		
		HDR12	4:4:4/RGB	120.29		

DisplayPort	Resolution	Frame Rate	Color depth (bits)	Chroma Subsampling	DSC 1.2 <sup>1)</sup>	Data Rate (Gbps)	
DisplayPort 1.4 2016-2019	4K	60	8-bit	4:4:4/RGB	No	15.68	
			8-bit	4:2:0/4:2:2		19.74	
			8-bit	DSC or 4:2:0		39.19 or 26.16	
		120	8-bit	4:4:4/RGB		No	13.68
			8-bit	DSC or 4:2:0			57.08 or 27.36
			8-bit	DSC			69.30
	240	8-bit	4:2:2	DSC + 4:2:0	80.91		
		8-bit	4:4:4/RGB	No	30.60		
		8-bit	DSC or 4:2:0		62.06 or 30.60		
	144	8-bit	4:2:2		DSC + 4:2:0	85.28	
		8-bit	4:2:0	DSC + 4:2:0	77.56		

1) - Display Stream Compression (DSC1.2) is a VESA-developed low-latency compression algorithm to overcome the limitations posed by sending high-resolution video over physical media of limited bandwidth. It is a visually lossless low-latency algorithm based on delta PCM coding and YCoCg-R colour space. It allows increased resolutions and colour depths and reduced power consumption.



## ONE Speaker Cable Guide

Speaker Cable Options, Q4'2019				Rating	Jacket Colour		
Model	Configuration	Cross Section to scale	Spool Length metre-marked	LSZH	Purple	Yellow	Charcoal
ONE-SP122	12AWG (65/30) 2 core OFC 7.5±0.2mm OD		152.5m 500ft	✓	✓	✓	‡
ONE-SP142	14AWG (82/33) 2 core OFC 7.5±0.2mm OD		152.5m 500ft	✓	✓	✓	‡
ONE-SP144	14AWG (82/33) 4 core OFC 8.8±0.2mm OD		152.5m 500ft	✓	✓	✓	‡
ONE-SP162	16AWG (65/34) 2 core OFC 6.0±0.2mm OD		305m 1000ft	✓	✓	✓	‡
ONE-SP164	16AWG (65/34) 4 core OFC 7.0±0.2mm OD		152.5m 500ft	✓	✓	✓	‡

Internal Conductor Colours		
Model	Pair A	Pair B
2 core	Black, Red	—
4 core	Black, Red	Green, White

- ‡ Available mid-Q4'2019
- All models in plastic spool box 340H x 265W x 335D (mm).
  - 12 cartons per pallet layer, maximum 3 layers per pallet.

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## Speaker Cable Reference

Selected American Wire Gauge (AWG) Conductor Sizes						Formulae	
Solid Conductor	10AWG	12AWG	14AWG	16AWG	18AWG	d = 0.127mm × 92 <sup>36-AWG</sup> <sub>39</sub>	
Cross-section (actual size)						A = π × (d/2) <sup>2</sup>	
Diameter (mm)	2.588	2.053	1.628	1.291	1.024	For inches, substitute 0.127mm with 0.005in	
Area (mm <sup>2</sup> )	5.261	3.309	2.081	1.309	0.823		

### Stranded Cores vs. Solid Cores

Speaker cable is often labelled with solid core AWG sizes while actually being constructed with multiple smaller conductor strands to improve flexibility and handling. The combined strands have the same cross-sectional area of conductor material as the equivalent solid core.

Solid Core	Stranded Equivalent	Common Labelling	Area (mm <sup>2</sup> )	Real-World Measurements
12AWG	65 × 30AWG	12AWG 65/30	3.309	Stranded diam. ≈ 105% solid diam. Stranded area ≈ 110% solid area
14AWG	82 × 33AWG	14AWG 82/33	2.081	
16AWG	65 × 34AWG	16AWG 65/34	1.309	

### ONE-SP Electrical Characteristics - Power loss by cable length

Cable Gauge	4Ω Speaker				8Ω Speaker				16Ω Speaker			
	10m 32ft	20m 65ft	40m 131ft	80m 262ft	10m 32ft	20m 65ft	40m 131ft	80m 262ft	10m 32ft	20m 65ft	40m 131ft	80m 262ft
16AWG	6%	12%	22%	35%	3%	6%	12%	22%	2%	3%	6%	12%
14AWG	4%	8%	15%	26%	2%	4%	8%	15%	1%	2%	4%	8%
12AWG	3%	5%	10%	18%	1%	3%	5%	10%	<1%	1%	3%	5%

Above figures are based on copper resistivity at 20°C (68°F). Resistivity and cable power loss both increase with temperature. For example, driving a 4Ω speaker over 80m of 16AWG cable loses 35% power (-1.9dB) at 20°C (68°F) and 39% (-2.1dB) at 75°C (167°F).

16AWG ≤ 13.7 Ω/km  
14AWG ≤ 8.62 Ω/km  
12AWG ≤ 5.64 Ω/km

Power loss % to dB conversion	5%	10%	15%	20%	25%	30%	35%	40%
	-0.2dB	-0.5dB	-0.7dB	-1.0dB	-1.2dB	-1.5dB	-1.9dB	-2.2dB

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## ONE Underterminated Network Cabling

Models Available	Class	Construction		Spool Length	Jacket Options	
		Type	Conductors		Rating	Colour
ONE-CAT6	CAT 6	U/UTP	Solid OFC 24AWG	305m 1000ft	LSZH or UL CM	Blue Green Purple Yellow White
ONE-CAT6A	CAT 6A	F/UTP	Solid OFC 23AWG	152.5m 500ft		

ONE Series CAT6 Network Cable is: Recommended  
Model: K13002-305M-XX

### Common Construction Names (ISO/IEC 11801 Annex E)

Name	Cable Shielding	Twisted Pair Shielding
U/UTP	—	—
U/FTP	—	Foil
F/UTP	Foil	—
S/UTP	Braiding	—
SF/UTP	Braiding + Foil	—
F/FTP	Foil	Foil
S/FTP	Braiding	Foil
SF/FTP	Braiding + Foil	Foil

### Compliance - LSZH models

CPR Declared Performance:  
ONE-CAT 6: Dca-s2,d2,a1 (EN 50575:2014+A1:2016)  
ONE-CAT 6A: Dca-s1,d2,a1 (EN 50575:2014+A1:2016)

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## Ethernet over Copper Reference Guide

Ethernet Standard	Twisted Pair Cable		Data <sup>1</sup> Bandwidth (Mbit/s)	Bits/Hz	Spectral Bandwidth (MHz)	Data lanes per direction
	Name	Rating (MHz)				
40GBASE-T	CAT 8	2,000	40,000	6.25	1,600	4 lanes <sup>2</sup>
25GBASE-T	CAT 8	2,500	25,000	6.25	1,000	
10GBASE-T	CAT 6A	500	10,000	6.25	400	
5GBASE-T	CAT 6	250	5,000	6.25	200	
2.5GBASE-T	CAT 5e	100	2,500	6.25	100	
1000BASE-TX	CAT 5	100	1,000	4	100	1 lane <sup>3</sup>
100BASE-TX	CAT 5	100	100	3.2	100	
10BASE-T	CAT 3	16	10	1	10	

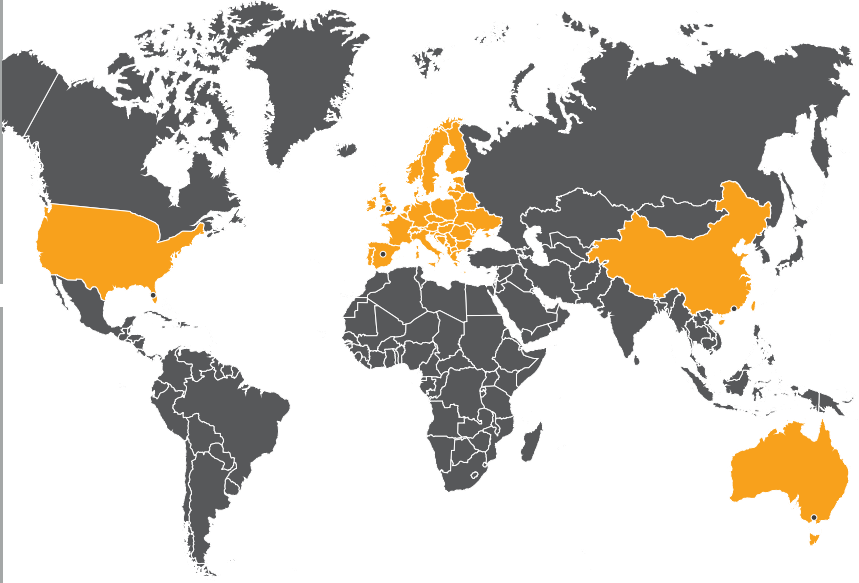
- Effective data bandwidth (after encoding overhead) is calculated as: Bits/Hz × Spectral Bandwidth × Data lanes per direction.
- All four twisted pairs operate at full duplex (thus 4 lanes per direction)
- One twisted pair operates TX at half duplex and another operates RX at half duplex. Two twisted pairs are unused.

Ethernet Standard	Maximum Run Length			What About CAT 7 / 7a Cables?
	<30m	<55m	<100m	
40GBASE-T	CAT 8	—	—	These were originally intended for 10GBASE-T and higher but were superseded by Cat 6a for 10BASE-T and bypassed by the 25 and 40GBASE-T standards. Cat 7 is rated to 600MHz and Cat 7a is rated to 1000MHz. The twisted pairs are individually shielded and the cables are shielded overall, providing better resistance to crosstalk. CAT7/7a cables are not ratified by TIA/EIA & hence doesn't appear in the cable guide charts.
25GBASE-T	CAT 8	—	—	
10GBASE-T	CAT 5e/6	CAT 6	CAT 6A	
5GBASE-T	CAT 5e	CAT 5e/6	CAT 6	
2.5GBASE-T	CAT 5e	CAT 5e	CAT 5e	
1000BASE-T	CAT 5e	CAT 5e	CAT 5e	

Lengths as recommended by 802.3x standards. It is generally possible to use lower rated cables for shorter runs.

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C-A6-EN-202001



**kordz**  
Connectivity Assured

**USA**

Future Ready Solutions  
24551 Production Circle  
Suite 2 Bonita Springs  
FL 34135, USA  
info@futurereadysolutions.com

**kordz**  
Connectivity Assured

**EUROPE**

The Service Station  
Melton Road  
Hickling Pasture  
Nottinghamshire  
LE14 3QG  
United Kingdom  
sales@kordz.co.uk

Calle Oro 45,  
Nave 10  
28770 Colmenar  
Viejo Madrid, Spain  
sales@kordz.co.uk

**kordz**  
Connectivity Assured

**HONG KONG**

Unit C, 3/F.  
Houston Industrial Building  
32-40 Wang Lung Street  
Tsuen Wan  
New Territories  
Hong Kong  
orders@kordz.com

**kordz**  
Connectivity Assured

**AUSTRALIA**

1/7 Sir Laurence Drive  
Seaford  
Victoria  
3198  
Australia  
wholesale@kordz.com

- HDMI 1.4** HDMI 1.4 is the seventh revision of the High Definition Multimedia Interface (HDMI) standard and was published in 2009. HDMI 1.4 cables and devices must be able to transmit a minimum of 10.2 Gbps (gigabits per second). HDMI 1.4 enabled new features such as HEAC (defined below), 3D and the first versions of 4K.
- HDMI 2.0** HDMI 2.0 is the tenth revision of HDMI and was published in 2013. HDMI 2.0 cables and devices must be able to transmit a minimum of 18 Gbps. This was the first HDMI revision that truly allowed for Ultra HD/4K video. HDMI later added High Dynamic Range to the standard in the 2.0a and 2.0b revisions.
- HDMI 2.1** This is the most recent version of HDMI; released in 2017. HDMI 2.1 is perhaps the most drastic change to the standard since its inception. While the physical layout of the cables and connectors are the same, the transport mechanism changes. Other features found in the HDMI 2.1 specification include variable refresh rate, quick media switching and quick frame transport. HDMI 2.1 compatible devices and cables must be able to transmit and receive a massive 48Gbps.
- AOC** AOC is the acronym for Active Optical Cable. Active optical cables use optical fibres to transport data, which is converted from electricity to light. This conversion enables signals to travel significantly greater distances than copper-based cables. AOC uses active electronics, built inside the head of the connector, which requires power (either from the source device or a separate power supply) to convert and transmit the signals.
- HDCP 2.2** High Bandwidth Digital Content Protection (HDCP) is the latest version of copyright protection, which is embedded in HDMI and DisplayPort™. HDCP 2.2 was released in 2015 and is backwards compatible. Devices requiring HDCP 2.2 must have 2.2 compliant devices from source all the way to the device.
- HDR** HDR stands for High Dynamic Range. HDR is a newer advancement in television which enables displays to show a greater range between the black and white levels on a display (called dynamic range). The greater the dynamic range, the more detail one can see in an image. There are various versions of HDR and each one has its pros and cons. The most common forms are HDR10, HDR10+, DolbyVision.
- DYNAMIC HDR** Dynamic HDR is the next evolution of High Dynamic Range video. How HDR differs lies in the metadata transmitted by source content. In standard HDR, a signal is sent when viewing begins where HDR is determined and if present, it remains in that state for the remainder of the content. Dynamic HDR allows for frame by frame HDR which allows for a movie to only show HDR in specific sequences, which allows for more efficient video transport and more impactful uses of HDR during the content.
- ARC** ARC, or Audio Return Channel, is a feature that started in HDMI 1.4 and allows for audio to transmit from a television to a receiver or other device, as opposed to only sending audio from a source such as a Blu-Ray player to a television or receiver. This is a very useful feature for those "cutting the cord" where off air antennas are used or built-in streaming applications such as Netflix, which allows for a better listening experience by bypassing television speakers, which are usually substandard quality.

# Tech Icon Glossary



eARC or Enhanced Audio Return Channel is the next iteration found in the new HDMI 2.1 standard. The biggest change in eARC is immersive audio formats such as Dolby ATMOS, DTS:X and Auro3D. These audio formats allow for a greater listening experience by adding audio overhead and in a greater 3D type space, called object-based audio. eARC supports up to 32 channels of high resolution 192/24 audio.



HEAC stands for HDMI Ethernet/Audio Return Channel. Beyond ARC, HDMI 1.4 also added Ethernet support. This enabled two-way internet connections via HDMI if one device has an established Ethernet connection. This is particularly useful if a display needs an Ethernet connection and a source, which is HEAC compatible, is already connected.



3D stands for three-dimensional video. 3D was very popular in the early 2010's and typically relies on glasses, either coloured or active shutter, to give an image three -dimensional depth. 3D often required higher refresh rates to allow for each eye to receive full resolution of the image. There are various formats for 3D, some of which require more data than others.



1080p is the top resolution for non UHD/4K displays. 1080p means there are 1080 vertical lines of resolution, along with 1920 lines of horizontal resolution. The p stands for progressive scan, which is a method where each horizontal line is scanned consecutively (1,2,3 etc) as opposed to interlace where odd then even lines are scanned (1,3,5 ... then 2,4,6,...) Progressive scan provides a much better viewing experience than interlace. A 1080p image has 2.07 million pixels (2 megapixels).



4k Ultra HD is the next generation of high definition video, where both the vertical and horizontal resolution is doubled to 3,840 x 2160. There is a bit of a misnomer when calling Ultra HD 4K, as the resolution for Ultra HD falls just short of four thousand horizontal lines of resolution. This is due to the aspect ratio of televisions (16:9 or 1.78:1) being slightly narrower than cinemas (1.85:1). An Ultra HD image has 8.3 million pixels (8.3 megapixels).



This icon needs to be broken into a couple explanations, 4K refers to the native resolution of 4K, as described in the icon above. 60Hz refers to the how many frames are shown per second. There are many frame rates, but most common are 24, 25, 30, 50, and 60. The higher the frame rate, the more data. As an example, HDMI 1.4 could handle Ultra HD/4K with 4:4:4 24Hz, as the bitrate 8.91 gigabits/second (Gbps). The same signal at 60Hz comes in at 17.2 Gbps. 4:4:4 refers to the colour compression scheme, called chroma subsampling. Without getting too detailed 4:4:4 means there is no colour compression, thus providing pristine colour accuracy. Other options are 4:2:0 and 4:2:2 colour compression.



This icon states that this HDMI cable is capable of transmitting Ultra HD/4K signal up to 3 meters (9.84 feet)



This icon states that this HDMI cable is capable of transmitting Ultra HD/4K signals up to 5 meters (16.4 feet).

# Tech Icon Glossary



5K is specific to video shot in anamorphic aspect ratio (2.35:1). You most often see these commercial movie theaters. Videos output in anamorphic typically have a black bar on the top and bottom of the screen. The typical video resolution for 5K is 5120x2160. You'll notice that the vertical resolution is the same as 4K. Since there are more horizontal pixels, 5K resolutions have higher bitrates than 4K and not all cables are capable of transmitting 5K signals. 5K images come in at 22.1 megapixels.



8K is the next wave of high-resolution video and is double the vertical and horizontal resolution of Ultra HD/4K at 7680x4320. There are 33.2 million pixels (33.2 megapixels) in an 8K image.



10K is double the vertical and horizontal resolution of 5K, which is found in videos shot and produced in anamorphic (2.35:1) aspect ratio. The most common resolution of 10K will be, as it is not widely adopted currently, 10240x4320. 10K equates to just over 44 megapixels.



10.2 Gbps means that the HDMI cable is capable of the speeds required in the HDMI 1.4 standard, which was released in 2009. In this case, the cable must be capable of sending/receiving 10.2 billion bits per second.



18 Gbps is based on the HDMI 2.0 standard, which was released in 2013. This means that the cable is capable of handling 18 billion bits per second.



48 Gbps is the latest speed for the newest standard, HDMI 2.1, which was released in the fall of 2017. At 48 billion bits per second, these cables are transmitting massive amounts of data and thus significant engineering and care is required to pull these off, particularly in distances beyond a few meters.



TOSLink is an optical audio cable, originally designed by Toshiba. TOSLink is easily identified by its square shaped connector, is used to transmit digital audio via S/PDIF (Sony Phillips Digital Interface) from a device or display to a receiver. TOSLink does have limitations and is not designed for immersive audio formats.



HD Audio is a term for high resolution audio. HD audio typically refers to content recorded and played back at rates at or higher than 44.1K samples per second and a bit depth of 16 or greater. Common HD audio formats are 96Hz/24b and 192Hz/24b.

# Tech Icon Glossary



HDBaseT™ is a proprietary format of transporting uncompressed HD and UHD video over Ethernet. Founded by Valens, HDBaseT™ enables ease of distributing HD and UHD quality video throughout a residence via existing or new Ethernet cables within the home.



This cable is able to transmit 4K video with 60 frames per second with 4:2:0 chroma subsampling up to forty meters (131.2). This equates to approximately 10.2 Gbps.



This cable is able to transmit 4K video with 60 frames per second with uncompressed colours up to 40 meters (131.2). This equates to 18 Gbps.



PoE (or Power over Ethernet) allows for devices to operate without the need for a separate power adapter, as the power is provided by a PoE switch. Based off the IEEE 802.3af-2003 standard, PoE provides up to 15.4 watts of power. IEEE 802.3af-2009, called PoE+ provides 25.5watts of power. PoE is very useful for wiring devices such as video cameras and wireless access points. PoE is standardised to adhere to specific voltage ranges between 37 and 57 volts. This ensures that any PoE device connected to a system receives a compatible power supply.



PoC (or Power-over-Cable) works to similar principles (supplying simultaneous power and data signals over Cat cable) but is non-standardised and is applied to proprietary systems. Therefore, the voltage supply can be set to meet the needs of a specific product/system (which may be lower or higher than voltage range of PoE).



PoH (or Power over HDBaseT™) combines the flexibility of PoE with HDBaseT™. PoH has more power than PoE, at 100 watts which is enough to operate PoH enabled televisions.



This connector on this cable requires a minimum of 1 kg (2.2 lbs) of force to remove it from the connected device.



This connector on this cable requires a minimum of 2 kg (4.4 lbs) of force to remove it from the connected device.

# Tech Icon Glossary



This connector on this cable requires a minimum of 3kg (6.6 lbs) of force to remove it from the connected device.



This denotes a cable which is able to output Ultra HD/4K resolutions at framerates up to 120 frames per second utilizing Display Stream Compression, which is a new feature added in the HDMI 2.1 specification.



This denotes a cable which is able to output 8K (33 megapixels) resolutions at framerates up to 60 frames per second utilizing Display Stream Compression, which is a new feature added in the HDMI 2.1 specification.



32.4 Gbps refers to 32.4 gigabits per second. This amount of data is often used in widescreen computer monitors, which are attractive to games looking for a wide field of view.



DSC 1.2 or Display Stream Compression version 1.2 is a video compression scheme developed by VESA which enables 3:1 compression over HDMI and DisplayPort. DSC is considered lossless and enables higher resolutions and framerates to be transported over cables otherwise unable to do so. HDMI 2.1 is the first HDMI standard which has allowed video compression.



FEC or Forward Error Correction is a transmission scheme/protocol used to prevent errors before they occur. DisplayPort 1.4 utilizes FEC which allows it to provide a more reliable signal.







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