QED PROFESSIONAL
INSTALLATION CABLES

ISSUE 1

QED PROFESSIONAL

THE SOUND OF SCIENCE SINCE 1973

www.qed.co.uk

QED Professional is a range of high quality cables and accessories designed to give the same performance and value as our domestic award winning QED cables. This gives an assurance of better reliability and higher performance to both the installer and the consumer.

All our cables and connectors are held in high inventory within the UK and benefit from next working day delivery on orders made before 2pm.

CEDIA

CUSTOM
ELECTRONIC
DESIGN &
INSTALLATION
ASSOCIATION

NAL INSTALLATION 2 CORE CABLE PVC 100M

Cable Labelling

Our cables are accurately labelled with specific cable information and countdown meter markings for ease of use.

Packaging

All our cables are supplied in heavy duty 'PROboxes' or reels.

The usage table on the packaging helps installers keep track of how much cable remains after each job. The box colour also differentiates between LSZH and PVC outer sheaths, being black or blue respectively.

Connectors

With all of our QED Professional speaker cable products we advise the use of the award winning QED AIRLOC or Screwloc termination systems. All the information on cable termination and connectors can be found on pages 12-13.

AIRLOC
HIGH PERFORMANCE TERMINATION

40 *years* QED

est. 1973
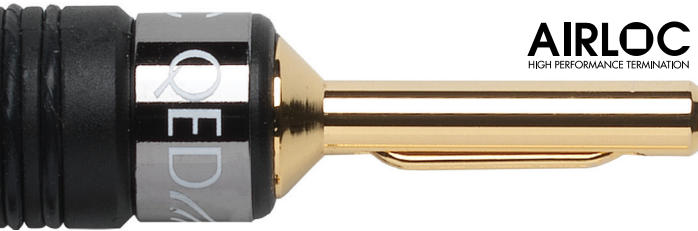
Founded by Bob Abraham and Ian Vine in 1973; QED has, over the past 40 years, acquired unparalleled knowledge and experience of hi-fi and home cinema cables and connectivity
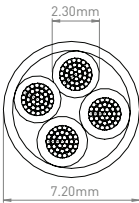
INDEX
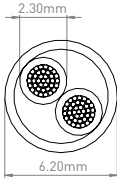
QX16/2

QX16/2 and QX16/4 LSZH

QX16/2 and QX16/4 LSZH are high performance and exceptional quality installation speaker cables with the added bonus of a LSZH fire rated outer sheath. They are designed to deliver excellent levels of performance in all multi-room and home cinema installations.
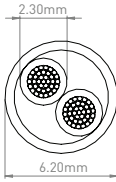

QX16/4

Features

- LSZH (Low Smoke Zero Halogen) High Performance outer jacket.
- Complete cable assembly exceeds IEC 61034-1:2005, IEC 61034-2:2005 IEC 60332-1-2:2004, IEC 60754-2:1991 for fire and gas emissions.
- Large cross-sectional area of high purity copper conductors ensures good performance levels are maintained - even on longer runs.
- Colour-coded conductor sheaths.
- Sequentially metre marked.
- Supplied in 100m (328ft) PRObox & on 300m (984ft) reel.

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4010	QX16/2 (Two Core Speaker Cable) LSZH Pink	100m	Box
QE4015	QX16/2 (Two Core Speaker Cable) LSZH Pink	300m	Reel
QE4020	QX16/4 (Four Core Speaker Cable) LSZH Pink	100m	Box
QE4025	QX16/4 (Four Core Speaker Cable) LSZH Pink	300m	Reel

QX16/2 and QX16/4 PVC

QX16/2 and QX16/4 PVC are high performance and exceptional quality installation speaker cables with a flame retardant PVC outer sheath. They are designed to deliver excellent levels of performance in all multi-room and home cinema installations.

2.30mm

6.20mm

QX16/2

2.30mm

7.20mm

QX16/4

Features

- PVC Flame retardant high performance outer jacket.
- Meets or exceeds IEC60332-1.
- Large cross-sectional area of high purity copper conductors ensures good performance levels are maintained - even on longer runs.
- Colour-coded conductor sheaths.
- Sequentially metre marked.
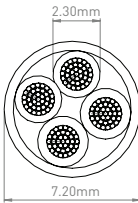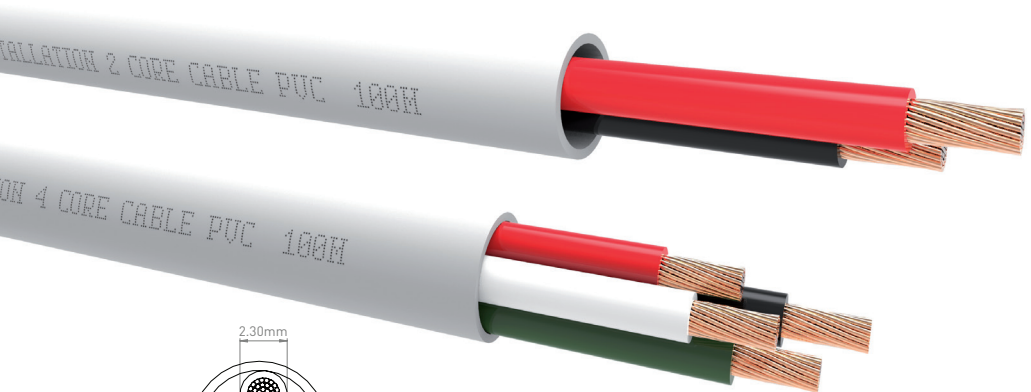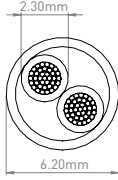- Supplied in 100m (328ft) PRObox & on 300m (984ft) reel.

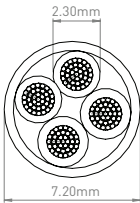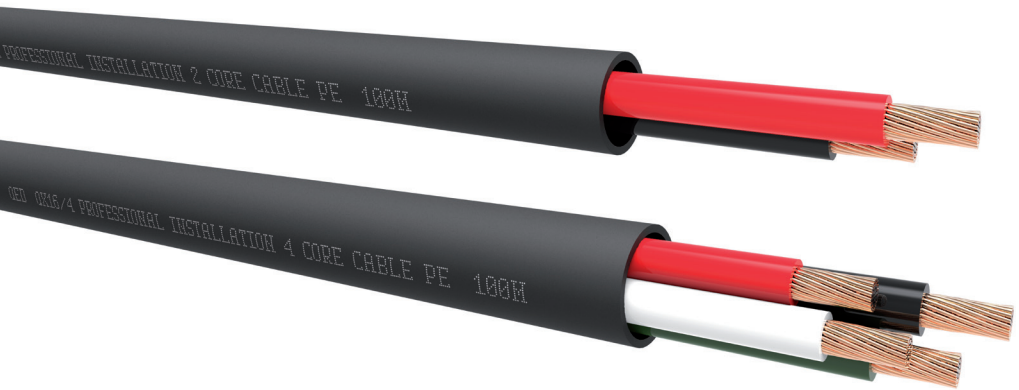| PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4130	QX16/2 (Two Core Speaker Cable) PVC White	100m	Box
QE4135	QX16/2 (Two Core Speaker Cable) PVC White	300m	Reel
QE4140	QX16/4 (Four Core Speaker Cable) PVC White	100m	Box
QE4145	QX16/4 (Four Core Speaker Cable) PVC White	300m	Reel

2.30mm

6.20mm

QX16/2 PE

QX16/2 and QX16/4 PE

QX16/2 and QX16/4 PE are high performance and exceptional quality installation speaker cables with a water and UV resistant PE outer sheath.

They are designed to deliver excellent levels of performance in most outdoor installations with no additional conduit required.

2.30mm

7.20mm

QX16/4 PE

Features

- Water and UV resistant PE Outdoor outer jacket.
- Meets or exceeds UV resistance ISO 4892-2.
- No additional conduit required saving on installation costs.
- Large cross-sectional area of high purity copper conductors ensures good performance levels are maintained - even on longer runs.
- Colour coded conductor sheaths.
- Sequentially metre marked.
- Supplied in 300m (984ft) reels.

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4155	QX16/2 (Two Core Speaker Cable) PE Black	300m	Reel
QE4165	QX16/4 (Four Core Speaker Cable) PE Black	300m	Reel

QX100 (CT100 Type)

A high quality cable manufactured to the industry standard CT100 type geometry. Ideal for professional TV and CCTV system installations including digital satellite, terrestrial and cable TV.

1mm

6.65mm
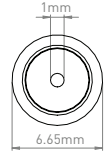
QX100 (CT100)

Features

- LSZH (Low Smoke Zero Halogen) High Performance outer jacket.
- Complete cable assembly exceeds IEC 61034-1:2005, IEC 61034-2:2005 IEC 60332-1-2:2004, IEC 60754-2:1991 for fire and gas emissions.
- Low loss foamed polyethylene dielectric.
- Dual screen of conductive foil and woven braid for excellent noise rejection.
- True 75 Ohm characteristic impedance.
- Supplied in 100m (328ft) Probox and 250m reels in black.

0.80mm

6mm
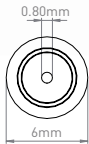
QXDAV1-FLX

QXDAV1-FLX

A flexible high performance audio/video co-ax cable ideal for most digital/analogue audio and video applications. It features a close bond double screen of Aluminium Mylar and woven tinned copper braids for excellent noise rejection.

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4050	QX100 COAX LSZH White	100m	Box
QE4055	QX100 COAX LSZH Black	100m	Box
QE4056	QX100 COAX LSZH Black	250m	Reel
QE4075	QXDAV1 FLX Audio/Video Co-ax PVC	150m	Box

QXCAT5e UTP

A high quality unscreened Cat5 enhanced data networking cable with the added bonus of a LSZH fire rated jacket. Perfect for Systemline products and any multi-room and data system designed to run on Cat5e cable.

1mm

6.3mm
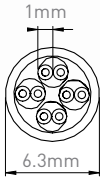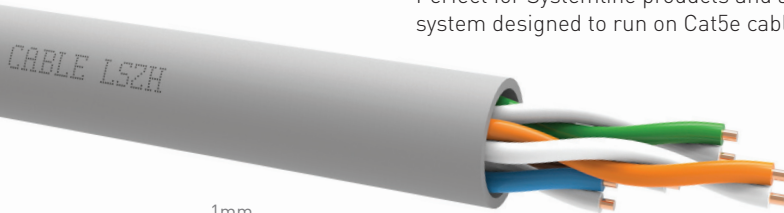
QXCAT5e UTP

Features

• LSZH (Low Smoke Zero Halogen) High Performance outer jacket.

• Complete cable assembly exceeds IEC 61034-1:2005, IEC 61034-2:2005 IEC 60332-1-2:2004, IEC 60754-2:1991 for fire and gas emissions.

• Certified Cat5e performance.

• Industry standard conductor colour coding.

• Sequentially metre marked.

• Supplied in 200m (656ft) Probox.

1mm

6.5mm
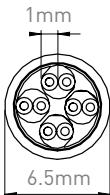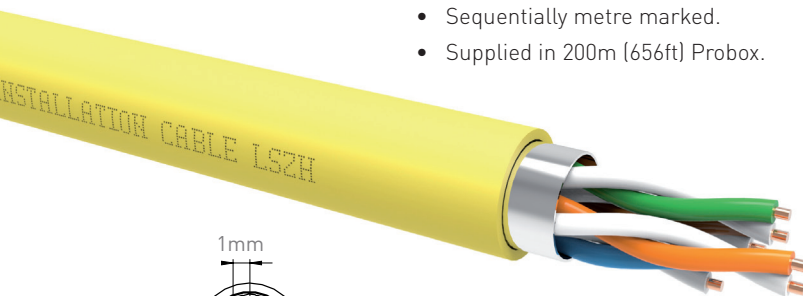
QXCAT5e FTP Screened

QXCAT5e FTP Screened

Receive all the features of CAT5e UTP with the addition of an Aluminium Mylar screen for excellent noise rejection.

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4060	QXCAT5 FTP LSZH Yellow	200m	Box
QE4065	QXCAT5 UTP LSZH Grey	200m	Box

QXCAT6 UTP

The CAT6 UTP range of high performance network cables with a flame retardant PVC outer sheath is available in 4 different colours. Each cable is designed to cope with demanding distribution applications over UTP to transport high bandwidth control, Ethernet and HDMI 1080p signals to multiple displays over distances up to 100m with performance up to 250MHz. Suitable for HDBaseT™ applications.
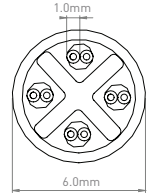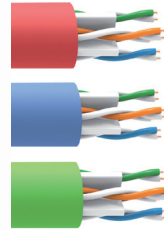
QXCAT6 UTP

Available in grey, red, blue and green

QXCAT6 FTP Screened

Get all the features of QXCAT6 UTP with the addition of an Aluminium Mylar screen for excellent noise rejection.

Features

• Flame retardant PVC outer jacket with rip cord exceeds IEC 60332-1- 2:2004 and UL444

• Suitable for use with all major multi-room control systems and recommended for use with all Systemline products.

• Performance up to 250MHz and suitable for HDBaseT™ applications.

• Sequentially metre marked

• Supplied in 200m (328ft) Grey only & 305m PRObox.

• Large diameter central core for easier draw out which prevents kinking and pig tailing at end of reel
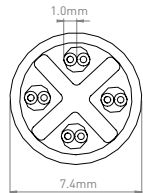
QXCAT6 FTP Screened

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4170	QXCAT6 UTP PVC Flame Retardant Grey	200m	Box
QE4175	QXCAT6 UTP PVC Flame Retardant Green	305m	Box
QE4180	QXCAT6 UTP PVC Flame Retardant Blue	305m	Box
QE4185	QXCAT6 UTP PVC Flame Retardant Red	305m	Box
QE4190	QXCAT6 UTP PVC Flame Retardant Grey	305m	Box
QE4195	QXCAT6 FTP PVC Flame Retardant Yellow	305m	Reel

QX5CV-SC Five Core

QX5CV is designed for the professional installer - a compact one cable solution for all high-end projector and flat screen installs. This one cable literally does do it all - component (YUV), s-video (YC) and RS232 or IR, all in one easy run. The QX5CV exhibits excellent noise rejection even over long runs.

3.50mm

0.85mm

11.25mm
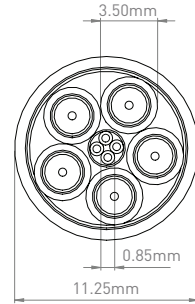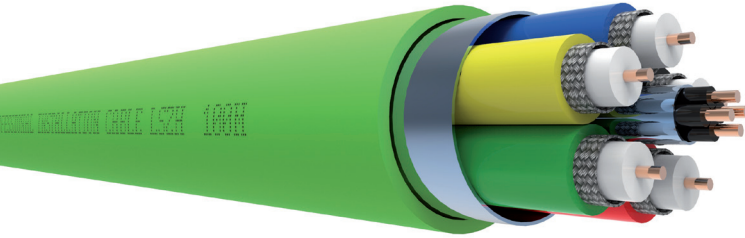
QX5CV-SC Five Core

Features

- LSZH (Low Smoke Zero Halogen) High Performance outer jacket.

- Complete cable assembly exceeds IEC 61034-1:2005,
  IEC 61034-2:2005 IEC 60332-1-2:2004, IEC 60754-2:1991 for fire and gas emissions.

- True 75 Ohm high purity solid core centre conductor ensures signal integrity - even on longer runs.

- Features outer Aluminium Mylar screen and individual screens of woven tinned copper braids for excellent noise rejection.

- Available in colour coded Green.

- Supplied in 50m (164ft) Probox & on 100m (328ft) reel.

| Possible Usage/Applications		
Signal	**Connection/Type**	**Suggested Conductor Usage**
Video	1 x S-Video (YC)	2 x co-ax cables (Black & Yellow)
	1 x Component (YUV)	3 x co-ax cables (Red, Green & Blue)
Video + Data	1 x VGA	5 x co-ax cables or 3 x co-ax and twisted pairs
	1 x RGBHV	5 x co-ax cables or 3 x co-ax and twisted pairs
	1 x RGBS	4 x co-ax cables (1 x co-ax and twisted pairs spare)
	1 x RGsB	3 x co-ax cables (2 x co-ax and twisted pairs spare)
Video	1 x Component (YUV)	3 x co-ax cables (2 x co-ax and twisted pairs spare)
	1 x S-Video	2 x co-ax cables (3 x co-ax and twisted pairs spare)
Control	Crestron	Twisted pairs (5 x co-ax spare)
	RS232	Twisted pairs (5 x co-ax spare)
	IR or Trigger	Twisted pairs (5 x co-ax spare)

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE4040	QX5CV-SC LSZH Green - WHILE STOCKS LAST	50m	Box
QE4045	QX5CV-SC LSZH Green - WHILE STOCKS LAST	100m	Reel

Performance Active HDMI

The QED HDMI cable is specifically designed to work with modern high performance projectors or display screens at High Speed over distances exceeding 8m. To do this it incorporates the latest Active Filter Technology - which means that the cable can be readily installed within walls or ceilings without the need for any extra power supplies or bulky electronics.

The trace diagram below shows how a normal 15m HDMI cable fails to deliver a readable digital High Speed signal. None of the plot lines should lie within the central mask (red area) if the cable is to meet the minimum specification. On the below right is our 15m QED Performance Active cable, which renders the signal intelligible over the same distance.
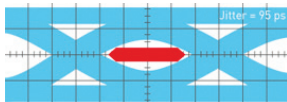
TYPICAL STANDARD CABLE   QED PERFORMANCE CABLE
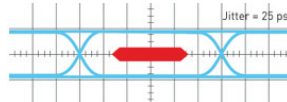
Features

• Active Filter Technology guarantees high speed performance up to 15m.

• No extra external power required and no bulge in the cable.

• Deep colour, 3D, 4K compatible.

• HDMI Ethernet and Audio Return channel.

• Authorised Test Centre Certified High Speed HDMI cable.

• Pixel clock 340MHz, Data rate 10.2Gb/s.

PART NO.	DESCRIPTION	LENGTH	PACKAGING
QE3110	Performance Active HDMI High Speed with Ethernet	8m	Box
QE3112	Performance Active HDMI High Speed with Ethernet	10m	Box
QE3114	Performance Active HDMI High Speed with Ethernet	12m	Box
QE3116	Performance Active HDMI High Speed with Ethernet	15m	Box

QED produce a range of speaker cable terminations, which are designed to work seamlessly with all QED Professional speaker cables.

Screwloc
Banana and Spade Termination

Screwloc 4mm plugs and Spade terminations provide secure cable connection. They are 24c gold plated for optimum signal transfer.

They have colour coded ABS barrels to ensure correct phasing and prevent amplifier damage.

PART NO.	DESCRIPTION	QUANTITY
QE1870	QED Screwloc 4mm Banana Plug (25 x Red and 25 x Black)	50
QE1880	QED Screwloc 4mm Banana Plugs (5 x Red and 5 x Black)	10
QE1885	QED Screwloc 4mm Banana Plugs (2 x Red and 2 x Black)	4
QE1890	QED Screwloc 6-10mm Spade (5 x Red and 5 x Black)	10
QE1895	QED Screwloc 6-10mm Spade (2 x Red and 2 x Black)	4

AIRLOC
HIGH PERFORMANCE TERMINATION
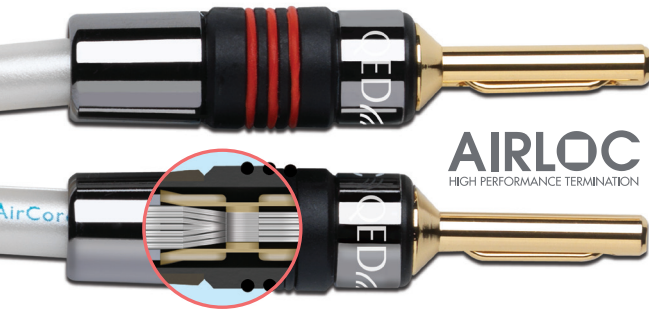
AIRLOC is QED's award winning loudspeaker cable termination method using specialist equipment. QED developed AIRLOC, a solder-free, airtight connection between the two metals of cable and plug. This method allows the cable and plug to offer the optimum signal transfer and therefore, better sound quality. It also reduces contact resistance and ensures perfect long-term performance.

Contact Area
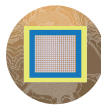
Cross section of standard screwlock termination.

Cross section of a cable terminated using AIRLOC.

AIRLOC Metal 4mm Plug
Features:

• New designed metal body
• 24c gold plated
• Brass body
• New strengthened plug
• 2.5 and 4.0mm shims
• Tray of 20

AIRLOC ABS 4mm Plug and Spade
Features:

• New design
• 24c gold plated
• Brass body
• 2.5 and 4.0mm shims
• Tray of 20

PART NO.	DESCRIPTION	QUANTITY
QE1810	QED Airloc 4mm Banana Plugs (10x Red and 10 x Black)	20
QE1815	QED Airloc 4mm Banana Plugs (10x Blue and 10 x Yellow)	20
QE1840	QED Airloc Plastic Wide Spade (10 x Red and 10 x Black)	20
QE1830	QED Airloc Plastic Standard Spade (10 x Red and 10 x Black)	20
QE1910	QED Airloc Metal 4mm Banana Plug (10 x Red and 10 x Black)	20

Tools

The AIRLOC crimp tool comes in hand held and desk top versions. This is used to crimp the brass barrel around the wires to create the air tight seal.

This tool is required by any installer of the QED AIRLOC termination.

PART NO.	DESCRIPTION
P-AT1	AT1 Bench Airloc Tool
P-AT2	AT1 Hand Held Airloc Tool

Order Information
Phone our customer sales team on **01279 501111** or email: **sales@armourhome.co.uk**
www.QED.co.uk

SPEAKER CABLE // **Low Smoke Zero Halogen (LSZH)**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4010	QX16/2 (Two Core Speaker Cable) LSZH Pink	100m	Box	
QE4015	QX16/2 (Two Core Speaker Cable) LSZH Pink	300m	Reel	
QE4020	QX16/4 (Four Core Speaker Cable) LSZH Pink	100m	Box	
QE4025	QX16/4 (Four Core Speaker Cable) LSZH Pink	300m	Reel	

SPEAKER CABLE // **Flame Retardant PVC**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4130	QX16/2 (Two Core Speaker Cable) PVC White	100m	Box	
QE4135	QX16/2 (Two Core Speaker Cable) PVC White	300m	Reel	
QE4140	QX16/4 (Four Core Speaker Cable) PVC White	100m	Box	
QE4145	QX16/4 (Four Core Speaker Cable) PVC White	300m	Reel	

SPEAKER CABLE // **PE OUTDOOR BURIABLE SPEAKER CABLE**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4155	QX16/2 (Two Core Speaker Cable) PE Black	300m	Reel	
QE4165	QX16/4 (Four Core Speaker Cable) PE Black	300m	Reel	

AV CO-AX CABLE

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4050	QX100 COAX LSZH White	100m	Box	
QE4055	QX100 COAX LSZH Black	100m	Box	
QE4056	QX100 COAX LSZH Black	250m	Reel	
QE4075	QXDAV1 FLX Audio/Video Co-ax PVC	150m	Box	

CAT 5 // **UTP & FTP SCREENED**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4060	QXCAT5 UTP LSZH Grey	200m	Box	
QE4065	QXCAT5 FTP LSZH Yellow	200m	Box	

CAT 6 // **UTP & FTP SCREENED**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4170	QXCAT6 UTP PVC Flame Retardant Grey	200m	Box	
QE4175	QXCAT6 UTP PVC Flame Retardant Green	305m	Box	
QE4180	QXCAT6 UTP PVC Flame Retardant Blue	305m	Box	
QE4185	QXCAT6 UTP PVC Flame Retardant Red	305m	Box	
QE4195	QXCAT6 UTP PVC Flame Retardant Grey	305m	Box	
QE4190	QXCAT6 FTP PVC Flame Retardant Yellow	305m	Reel	

MULTI-PURPOSE // **FIVE CORE**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE4040	QX5CV-SC LSZH Green - WHILE STOCKS LAST	50m	Box	
QE4045	QX5CV-SC LSZH Green - WHILE STOCKS LAST	100m	Reel	

HDMI // **ACTIVE**

PART NO.	DESCRIPTION	LENGTH	PACKAGING	QTY
QE3110	Performance Active HDMI High Speed with Ethernet	8m	Box	
QE3112	Performance Active HDMI High Speed with Ethernet	10m	Box	
QE3114	Performance Active HDMI High Speed with Ethernet	12m	Box	
QE3116	Performance Active HDMI High Speed with Ethernet	15m	Box	

CONNECTORS // **SPEAKER CABLE**

PART NO.	DESCRIPTION	QUANTITY	QTY
QE1870	QED Screwloc 4mm Banana Plug (25 x Red and 25 x Black)	50	
QE1880	QED Screwloc 4mm Banana Plugs (5 x Red and 5 x Black)	10	
QE1885	QED Screwloc 4mm Banana Plugs (2 x Red and 2 x Black)	4	
QE1890	QED Screwloc 6-10mm Spade (5 x Red and 5 x Black)	10	
QE1895	QED Screwloc 6-10mm Spade (2 x Red and 2 x Black)	4	

CONNECTORS // **SPEAKER CABLE**

PART NO.	DESCRIPTION	QUANTITY	QTY
QE1810	QED Airloc 4mm Banana Plugs (10x Red and 10 x Black)	20	
QE1815	QED Airloc 4mm Banana Plugs (10x Blue and 10 x Yellow)	20	
QE1840	QED Airloc Plastic Wide Spade (10 x Red and 10 x Black)	20	
QE1830	QED Airloc Plastic Standard Spade (10 x Red and 10 x Black)	20	
QE1910	QED Airloc Metal 4mm Banana Plug (10 x Red and 10 x Black)	20	

CONNECTORS AND TOOLS // **SPEAKER CABLE**

PART NO.	DESCRIPTION	QTY
P-AT1	AT1 Bench Airloc Tool	
P-AT2	AT1 Hand Held Airloc Tool	

Cable Information

Low Smoke Zero Halogen (LSZH)

Most cables feature PVC insulation, some have a basic fire rating such as CL3, etc. Unfortunately, most cables give off hazardous toxic smoke during a fire, posing a very serious health risk. LSZH cables are made from a special compound that performs as well as PVC insulation, but crucially gives off very little smoke and no halogen toxins in the event of a fire.

Many leading architects and builders are now specifying LSZH spec cables as standard, along with commercial and marine.

Only LSZH cables meet the legislated fire specifications for boat installations.

Conforms to the following specifications:

IEC 61034-1:2005	Measurement of smoke density of cables burning
IEC 61034-2:2005	Under defined conditions.
IEC 60332-1:2004	Test for vertical flame propagation for a single insulated wire or cable.
IEC 60754-2:1991	(Amendment1, 1997) test on gas evolved during combustion of electric cables.

Other brands by Armour Home Electronics

Q Acoustics install range incorporates indoor and weatherproof in-ceiling loudspeakers,
outdoor on-wall loudspeakers and on-ground 'rock effect' loudspeakers.
All of these models boast superb sound quality, with style and function. www.Qacoustics.co.uk

Music and more - Integrated home entertainment
www.systemline.co.uk