



CAT5E & CAT6 COPPER SYSTEMS



In today's technological world, communication is key. Reliable, effective and versatile communications are no longer a luxury; they are an integral part of 21st century life. From the smallest business to the largest multinational corporation; integrated communication systems are changing the way we work.

The needs of tomorrow's business are difficult to predict, that's why specifying the right infrastructure for your communication network is of vital importance. Not only must the system be able to cope with today's demanding internet, intranet, video conferencing, e-mail and multimedia applications, but also accommodate the unknown applications of tomorrow.



Structured Cabling

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Connectix have been supplying networking products to the data and voice industry since 1993, and since then have grown to become one of the leading UK based manufacturers in the market. Thanks to an experienced team of committed networking specialists with a dynamic approach to product development and customer service, Connectix has achieved significant success in the industry.

Our design team is constantly anticipating market and technological trends to bring innovative products to market in the shortest possible time. The result is one of the most comprehensive ranges of networking systems available. And, to ensure long-life performance and reliability, Connectix Cabling Systems are manufactured in the UK to the highest specification from quality components.

With over 10 million points installed we are well on our way to becoming the UK's largest manufacturer of cabling products. Our system has been installed in over 50,000 sites. We ship over 20 million metres of cable a year and millions of outlets. Many well known leading companies, including ABB, LG Electronics and Rolls Royce to name a few, already benefit from Connectix

cabling installations. So, now that you know that Connectix can meet all your network needs, you have good reason to choose Connectix above all others as your preferred network system manufacturer. No matter what your business involves, Connectix has got the cabling solutions and products that will keep your company ahead in today's fast paced work environment.

At Connectix, our commitment to innovative design and development ensures our customers receive the very best integrated Cabling Systems for their specific needs. We offer products that are compatible with the current needs of our customers, and the needs they will have in the years to come.

Every business is different, which is why Connectix Cabling Systems can be individually designed and installed by a Connectix Approved Installer. Individual planning ensures that every company that chooses Connectix receive the ideal infrastructure for their unique requirements.

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Enhanced Category 5

For several years Enhanced Category 5 (Cat5e) has been the base standard for copper cabling systems. It was primarily developed to support Gigabit Ethernet (1000BASE-T), and included a number of new test parameters to provide a more tightly controlled cabling infrastructure than the previous Category 5. It was ratified in 1999 as an addendum to TIA/EIA-568-A and then became TIA/EIA-568-B in 2001.

Cat5e is the ideal medium for today's high speed protocols like Gigabit Ethernet that require four pair transmission at a bandwidth of up to 100 MHz.

Connectix Cat5e Cabling System far exceeds all the requirements of Category 5E as defined in TIA/EIA-568-B in addition to BS EN 50173, ISO/IEC 11801 (Class D) and CENELEC 50173.

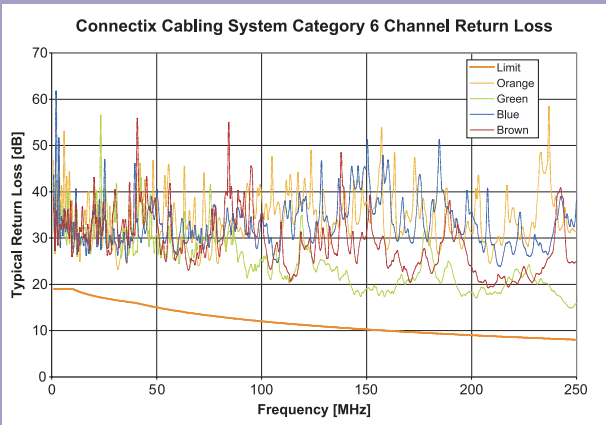
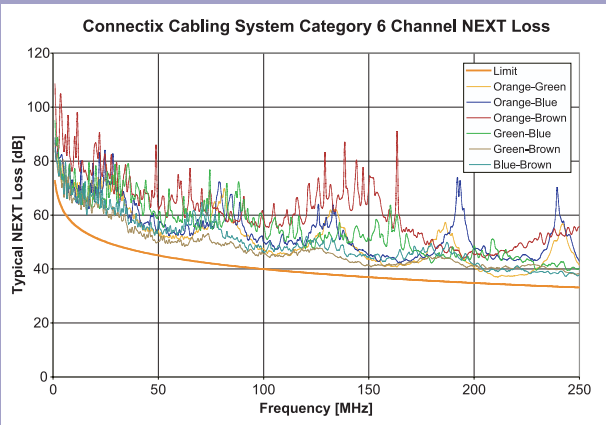
Category 6

Category 6 has been around for some time now, but since its ratification in 2002 it is fast becoming the most popular choice for high spec installations. Category 6 offers more than twice the bandwidth of Enhanced Category 5 and is tested up to 250 MHz. This not only provides an excellent platform for existing high speed applications, but also provides for future applications utilising high speed full duplex transport.

Category 6 is specified in TIA/EIA-568-B.2-1 and ISO/IEC 11801 (Class E). Connectix Category 6 Cabling System exceeds the Permanent Link and Channel specifications as well as the individual connecting hardware and cable specifications – ensuring true Cat6 performance as well as full backward compatibility with Category 5E and Category 5 systems.

TIA/EIA-568-B Permanent Link Performance Requirements									
Standard	Frequency	Insertion Loss (dB)	NEXT Loss (dB)	PSNEXT Loss (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)	Propagation Delay (ns)	Delay Skew (ns)
Cat5e	10 MHz	6.2	48.5	45.5	38.6	35.6	19	498	44
Cat5e	100 MHz	21.0	32.3	29.3	18.6	15.6	12	-	-
Cat6	10 MHz	5.5	57.8	57.3	44.2	41.2	21	498	44
Cat6	100 MHz	18.6	41.8	39.3	24.2	21.2	14	-	-
Cat6	250 MHz	27.4	35.3	32.7	16.2	13.2	10	-	-

TIA/EIA-568-B Channel Performance Requirements									
Standard	Frequency	Insertion Loss (dB)	NEXT Loss (dB)	PSNEXT Loss (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)	Propagation Delay (ns)	Delay Skew (ns)
Cat5e	10 MHz	7.1	47.0	44.0	37.4	34.4	17	555	50
Cat5e	100 MHz	24.0	30.1	27.1	17.4	14.4	10	-	-
Cat6	10 MHz	6.3	56.6	54.0	43.3	40.3	19	555	50
Cat6	100 MHz	21.3	39.9	37.1	23.3	20.3	12	-	-
Cat6	250 MHz	35.9	33.1	30.2	15.3	12.3	8	-	-



Installation and Warranty

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Approved Installers

To maintain high levels of quality we ensure that every company who installs our products has access to the right support from supply to training. Connectix have trained over 5000 installation engineers and have in excess of 150 Approved Installers.

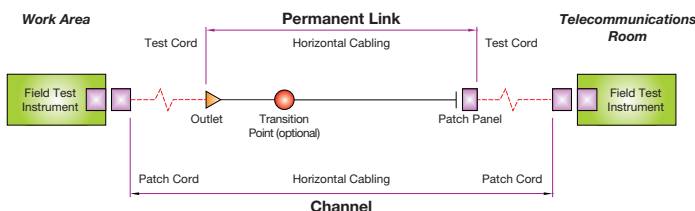
A Connectix Cabling System designed and installed by a Connectix Approved Installer will provide the optimum infrastructure to meet your company's present and future communication needs – with guaranteed reliability and the capacity to handle the demands of the future.

To gain approved status, Connectix installers must show excellence throughout all aspects of their business – from practical networking installation skills to up-to-date knowledge of the latest industry standards and trends. The creation of long-term, mutually beneficial partnerships with installers ensures all Connectix Cabling Systems are installed with confidence.

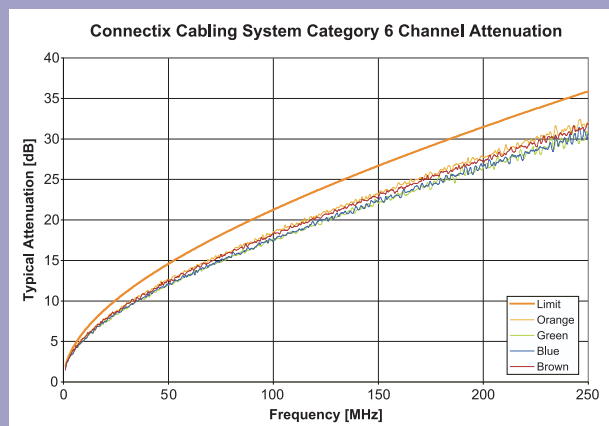
The Connectix 25 Year Warranty

The Connectix Cabling System 25 Year Warranty guarantees performance for the network.

Based on strength in product design, quality manufacture and specialist installation, every Connectix Cabling System customer receives long-term performance, reliability and peace of mind – guaranteed.



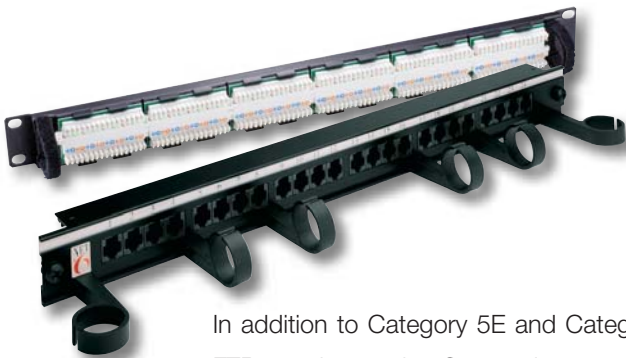
Schematic Representation of a Permanent Link and Channel Test Configuration



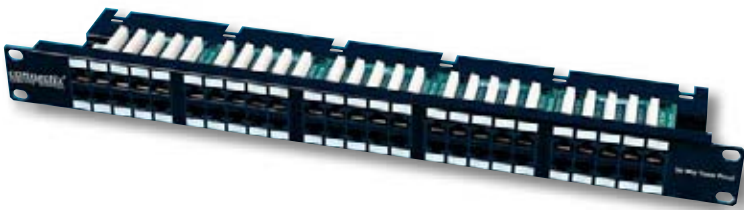
High Performance Equipment

At Connectix, we not only design and manufacture all our own products, but we also provide our installers and customers with all the support and exceptional customer service you would expect from an industry leading company.

Patch cord management is maintained by either loop and hook retainers or the patented slide-in cable ring. Connectix cable rings are designed to reduce wasted cabinet space, simplify patch cord management, and are available in a number of colours to help designation.



In addition to Category 5E and Category 6 UTP and FTP patch panels, Connectix manufacture a wide range of Telecoms panels, Through Coupler panels and cable management accessories.



The Connectix range of free standing and wall mounted cabinets offer a robust, secure solution for housing networking hardware. In addition to the vast stock, special requirements can be made-to-order.

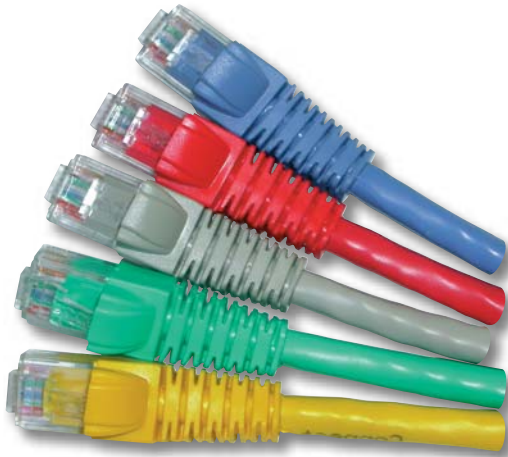


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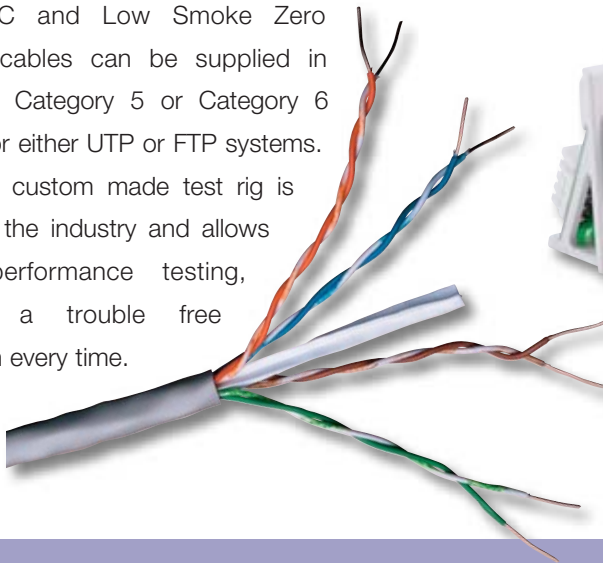
- ✕ Design
- ✕ Development
- ✕ Prototyping
- ✕ Research
- ✕ Customisation
- ✕ Manufacturing



Connectix Enhanced Category 5 and Category 6 patch leads have been designed to exceed the TIA/EIA-568-B.2 performance criteria for patch cords. A full range of colours and lengths are available in stock for both UTP and FTP systems.



Both PVC and Low Smoke Zero Halogen cables can be supplied in Enhanced Category 5 or Category 6 variants for either UTP or FTP systems. Connectix custom made test rig is unique in the industry and allows in-box performance testing, ensuring a trouble free installation every time.



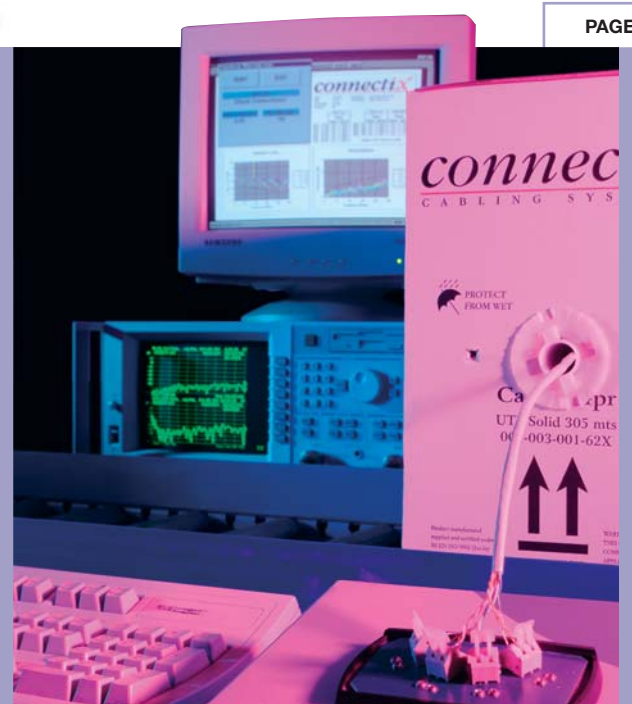
The Connectix range of outlets includes the unique 4 way tamperproof outlet and the industry leading Category 6, 4 way single gang shuttered outlet.



Standard modular outlets are available for UTP and FTP systems and LJ6C outlets are ideal for floor box applications. Angled modules are also available which can help reduce cable strain and bend radius.



Total commitment to quality assurance and testing is at the heart of everything Connectix develop and manufacture.





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