



The KEC NEWSLETTER



News from your local MK channel partner in Kuwait

Issue 7
October 2005

Page 1

2005 and another busy year.....

Page 2

The Honeywell takeover of Novar....

Page 3

Cooper and KEC join hands.....

Page 4-5

Project applications for Ackermann & Zuccchini.....

Page 6-7

Product News....from lighting to CCTV....

Page 8-9

Future proofing data cabling

Page 10-11

Dimming the lights.....

Page 12

Lighting: three stories.....

Page 14-15

KEC and MK news ..and some cricket....

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More and More are switching to MK - with Interest in Intelligent Building Solutions at an all-time High

2005 year-to-date has been a further period of impressive 'double-digit' growth for us at KEC, supported by an unprecedented level of construction activity here in Kuwait; the benefit of recent new showroom openings - *particularly in lighting* - new product introductions and several *notable* major project successes. Arguably, never has the electrical specifying community been so busy.

The interest shown in our *low-voltage 'intelligent building' systems* business - comprising in the main of *Gent* fire detection & alarm and voice annunciation equipment, *VisiPrime* CCTV systems, *Trend & Alerton* Building Management systems and *Brand-Rex* structured cabling & data solutions, has been at an all time high these past few months. In response we have hosted several highly successful industry seminars and presentations.

Equally encouraging has been the performance of our *MK* Wiring Device and *MK/Ega* and *Ackermann* Cable Management businesses, where we continue to gain share, as well as the considerable growth of our '*MK Boutique*' and '*KEC Technical Lighting*' operations at Sun City, Shuwaikh.

In this edition of the *KEC* Newsletter, we touch on the significant future opportunities for the Novar Intelligent Building Systems brands mentioned above, now that they form part of the fast growing global *Honeywell* Automation & Controls Solutions [ACS] Division of the *Honeywell Inc. Corporation*: the acquisition of the Novar Group was completed recently - see page 2.

In addition, we feature the future developments in our lighting business courtesy of the launch of a new and dynamic partnership with '*Cooper Lighting*' - see page 3 for details - part of the global *Cooper Industries Corporation* which represents an excellent and *totally* complementary addition to our overall *KEC* product portfolio.

This, together with the usual array of articles on new products, notable product application stories and news from around the industry, we trust, will make for interesting reading.

Once again may we take this opportunity to thank you for your ongoing support and to welcome you to this latest edition of the *KEC* Newsletter - and we hope that 2005 will *continue* to be mutually rewarding with further major growth and success.



An Ackermann Cable Management System has been chosen for this impressive building

Kuwait's leading low-voltage electrical installation equipment, systems solution and lighting supplier.



Honeywell Completes Acquisition of Novar

Honeywell International Inc. duly completed the acquisition of Novar plc, UK on 31st March 2005 - the UK-based parent company of the **MK Electric, Ega, Trend, Alerton, Gent, Brand-Rex, Ackermann and Friedland** brands which formed the successful Novar Intelligent Building Systems (IBS) division.

With immediate effect, therefore, the Novar Intelligent IBS businesses are currently being integrated to form a significant part of the future growth of the global Honeywell Automation & Control Solutions [ACS] business, - an US\$ 8 billion division of the global Honeywell success story whose four main areas of activity include Aerospace, Transportation Systems, Speciality Materials and Automation & Control Solutions.

This is a move that is expected to represent a major and exciting growth opportunity for KEC.

“On a day to day basis, from a KEC customer perspective, you will probably notice little change in your current relationship with us” adds KEC’s General Manager – Hazem Al Nouri “as the Honeywell management team both regionally and internationally is totally committed to retaining the strong Novar electrical brands and their current channel management partners.

“The recent acquisition of the Novar IBS business by Honeywell will undoubtedly offer many new and positive growth opportunities going forward because of the huge resources and investment capacity of the new organisation and KEC is really looking forward to playing a leading role in this evolution.”

The Honeywell Structure

“The Honeywell ACS division currently consists of **five** core businesses –

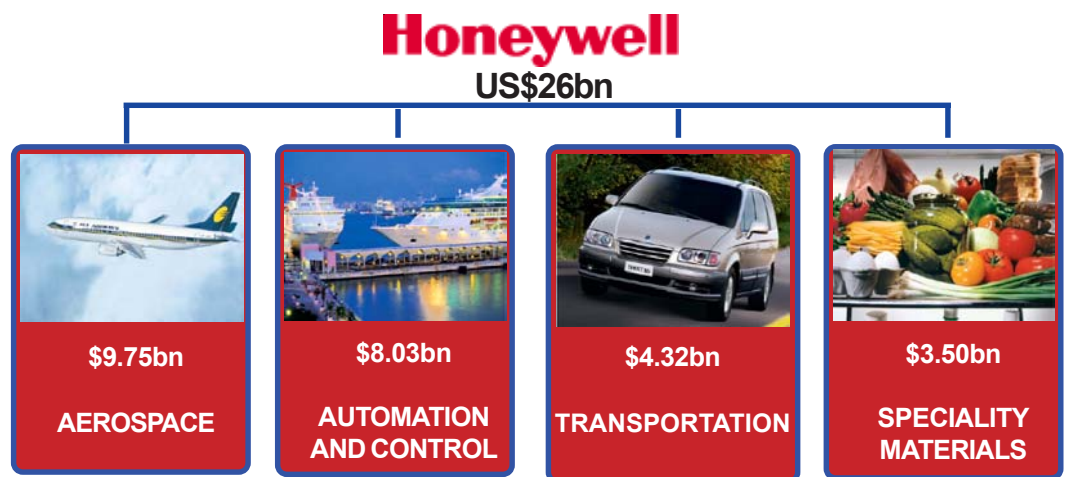
Life Safety [i.e. Fire Detection & Alarm], Security, Controls, Building Solutions and Process Control Solutions

into which the existing well known and respected Novar IBS brands are being integrated currently, “ explains Peter Woods, KEC’s Managing Director - Sales and Marketing.

“Moreover, given that much of Honeywell’s presence in the Kuwait market - via its Honeywell Kuwait JV - to date has been uniquely in the area of industrial process control, KEC’s successful and long-standing market presence is extremely well positioned in the Kuwait commercial and residential market sector to play a major role in driving growth.

“In essence, KEC will *continue* to be responsible for actively promoting, supporting and supplying the existing Novar Intelligent Building Solutions [IBS] brands such as **MK Electric, Ega, Trend, Alerton, Gent, Brand-Rex, VisiOprime, Ackermann and Friedland** - and will continue to strengthen its resources and capabilities.

“In parallel, the Honeywell Building Solutions Division [HBS] operating via the Honeywell Kuwait JV will promote and support *existing* Honeywell brands - with *both* organisations championing the trend towards ‘intelligent building solutions.’”



CEO’s Visit to Kuwait

On a recent visit to Kuwait Dave M. Cote - Honeywell’s Chairman and CEO took time out to meet with some of the leading Kuwait architectural and M&E consultancy personalities to reinforce Honeywell’s growth message; its commitment to an on-going added-value channel partner strategy; its determination to listen to the ‘Voice of the Customer’ and its quest for industry leadership. “It looks like exciting times lie ahead!”



Dave Cote - Honeywell’s Chairman & CEO meeting prominent Kuwait industry consulting engineers and specifiers during a recent visit.

“..... KEC will continue to be responsible for the promotion, support and supply of the existing Novar Intelligent Building Solutions brands such as **MK Electric, Ega, Trend, Alerton, Gent, Brand-Rex, VisiOprime, Ackermann and Friedland** - and will continue to strengthen its resources and capabilities.”



Perfect Partners: Cooper Lighting and KEC join hands.....



Representing a *further* important expansion to its lighting portfolio, KEC has recently *joined hands* with one of the USA's leading lighting companies - Cooper Lighting.

Headquartered in Peachtree City, 25 miles from Atlanta, Georgia and with global sales of more than US\$ 3 billion per annum, Cooper Lighting is one of the leading manufacturers of incandescent, fluorescent, and H.I.D. luminaires serving worldwide commercial, industrial, institutional, residential, utility, retail markets and complex environments. Cooper Lighting's goal is to offer a comprehensive line of lighting products which enable specifiers, contractors and distributors to turn to one supplier for the majority of their lighting needs.



Luminaire Monaco 6000

By offering its many brands (*Neo-Ray, Corelite, Metalux, McGraw-Edison, Lumiere, Halo, Portfolio, Iris, Sure-Lites, Fail-Safe, Lumark, MWS,*

DLS, RSA, Shaper and

Ametrix), Cooper Lighting is able to introduce products in a consistent format, offer products that complement each other's designs, offer wide access to all product information on its website or through other electronic and print media, and, most importantly, provide a consistent level of support to its customers.

Cooper Lighting products offer a unique combination of innovation, performance and value. Its brands represent some of the most innovative products in the market.

Ametrix Lighting



"The future for Cooper Lighting continues to be one of growth by increasing the breadth of range or by increasing the value built into those products in the marketplace."

Whether it is the *Lumiere Monaco* product line that utilises the T4 and T6 metal halide lamps, offering adjustable light distribution in a very small outdoor accent luminaire or the *McGraw-Edison* decorative post top induction lamp luminaire, which meets IES cutoff classification, the innovations are not achieved by sacrificing good value.

Last year, Cooper Lighting introduced *Invue Lighting Systems*, a complete outdoor architectural product line designed to meet today's demanding environmental and legislative needs for every outdoor lighting application.

Invue offers solutions for full cutoff compliance, spill light control, and path of egress illumination, while integrating the latest in high efficiency lamp technologies, resulting in reduced glare, improved visibility and optimised efficiencies.

Future Plans

"In the future, we will grow by expanding internally developed product offerings. For example, we developed *Iris*, the industry's first specification grade, downlighting series designed specifically for residential applications completely in-house," said Lance Bennett, the Director of Specification and Architectural Product Sales.

"We also will continue to grow through successful acquisitions, such as *Shaper, Corelite, Neo-Ray, Lumiere and RSA.*" These are the company's most recent acquisitions. By both means, the future for Cooper Lighting continues to be one of growth by increasing the breadth of the lighting product offering to select from or by increasing the value in those products in the marketplace.



Epic from Invue

Cooper Lighting is not content to rest on their past successes. "We want to continue to develop innovative lighting solutions for today's demanding customers by listening to product ideas and suggestions and staying aware of growing trends, such as energy legislation and sustainable

design issues," notes Bennett.

design issues," notes Bennett.

"With support close by from Cooper's Regional Headquarters in Dubai, this latest development is a natural fit" explained KEC's Peter Woods "and follows hard on the heels of our recent success in promoting CEAG Intelligent Emergency Lighting... another Cooper Corporation brand: and one that will hopefully enable us to secure a significant presence in Kuwait's commercial lighting market sector in the future."

Call the KEC Lighting Team today on Tel: 3985580 or visit our website at keckuwait.com



Project applications

Kuwait's new State Audit Bureau Chooses an Ackermann Cable Management Underfloor Solution to Provide Future-Proofing



State Audit Bureau

Kuwait's prestigious new State Audit Bureau HQ, currently under construction in Shuwaikh, will have the best solution to its power and data distribution needs. The chosen system is the latest Ackermann Cable Management Underfloor solution.

The totally flexible raised-floor cable management solution - currently being supplied - will feature more than 1000 Ackermann raised-floor 3 compartment floor boxes complete with more than 8,000 meters of Ackermann metal flexible conduit - complete with 32 amp tap-off units - and more than 2,300 meters of underfloor bus-bar power track thus providing unparalleled flexibility and hence future-proofing.

"The floor boxes are also flexible enough to



cater for Category 7 structured cabling or even a 'fibre to desk' distribution arrangement should the need arise later on," noted KEC's Rajan Peter.

Designed by the John Bonnington Partnership of the UK in association with The Associated Engineering Partnership here in Kuwait and under the local supervision of Pan Arab Consulting Engineers, the 30,000 sq. metre project - due for completion in 2006 - features a unique architectural design consisting of three office wings encapsulated by a light steel and glass roof with each office wing linked by footbridges and scenic lifts - see picture.

The mechanical and electrical installation is being carried out by Drake & Scull.



Need to know more about what an Ackermann Underfloor solution can do for your forthcoming project - call the KEC Cable Management and Wiring Device Team now on Tel: 3985580 or email kecsystems@keckuwait.com

Intelligent Buildings: KEC Hosts a Public Sector Seminar at the Kuwait Engineers' Society

KEC played host to a further seminar on 'Intelligent Buildings' at the Kuwait Engineers' Society recently to an audience of more than 90 public sector engineers from the Ministry of Public Buildings and Works, Ministry of Defence, Ministry of Communications and members of the Kuwait Fire Services Directorate.

With the concept of 'smart' or 'intelligent' buildings now more and more a feature of the future landscape of the region, the seminar provided an excellent opportunity to share experiences and discuss future trends.



The session provided engineers from all disciplines with an opportunity to have access to the latest thinking in controls and systems in Intelligent Buildings. Growing sophistication in all aspects of building control are now becoming increasingly a reality in the Kuwait construction market," explained KEC's Peter Woods in his opening remarks.

Call our KEC Systems Solutions Team to discuss your next Low-voltage Intelligent buildings, Fire, BMS, CCTV or Intelligent Emergency Lighting application on Tel: 3985580 - or email them at kecsystems@keckuwait.com

Zucchini Provides a Unique Bus-Bar Lighting Solution for the New Central Fruit & Vegetable Market

Kuwait's brand new Fruit & Vegetable Market project - *pictured* - is to be home to a uniquely designed Zucchini Bus-Bar solution supplied by KEC.

In an order worth more than US\$100,000 and involving in excess of 2,000 metres of bus-bar trunking manufactured in Zucchini's state-of-the-art operations in Italy - the solution has been designed to provide the new Central Fruit & Vegetable Market, currently under construction, with a bus-bar power track to cater for the project's lighting needs.

Designed in conjunction with Kuwait-based consultants Dar Al Dowailiah, one of Kuwait's leading mechanical & electrical contractors - Bader Al Mulla - will undertake this substantial installation. On-site commissioning and supervision will be provided by KEC's Zucchini-trained technicians.

"The new Kuwait Vegetable Market represents another excellent reference installation for Zucchini here in Kuwait,"



The planned new Central Market

commented Zucchini's Regional Manager - Simon Boutros, "and we are delighted to be working in association with KEC in building the Zucchini name in the burgeoning Kuwait market-place."



Want to know more about Zucchini bus-bar solutions and the impact that they can provide to your project? Call the KEC System Solutions Team now on Tel: 3985580 or email kecsystems@keckuwait.com

KEC secures 'The Avenues' Mega Shopping Mall Project for MK Masterseal

Several hundred *award-winning* MK Masterseal 2 gang IP56 weatherproof outlets have been supplied recently to one of the leading Kuwait M&E contractors - Bader Al Mulla - destined for Phase I of the new 'Avenues' Mega Shopping Mall - representing yet another significant 'MK Masterseal' success here in the region.



The extensive, easy-to-install, modern range, manufactured from tough polycarbonate materials, comprises 13amp sockets as well as *switch-socket* outlets, switches, bell-pushes, grid and secret-key switches, data outlets and *even* photo-electric dusk/dawn devices.

Masterseal is now specified and installed on virtually every major project installation to complement the standard MK offering.

MK Masterseal socket outlets are the *only* IP56 weatherproof products on the Kuwait market today that most importantly *retain* their IP protection rating even when an appliance is plugged into the unit - courtesy of the specially designed and patented MK 'gel seal'.



'The Avenues' Shopping Mall



Masterseal Applications

KEC solves external power problem for specifier

Specifiers often come to us to solve problems at KEC and here is an example where the KEC sales team's problem-solving capabilities came to the fore.

The application required the mounting of weatherproof outlets onto a concrete pillar.

The solution was to fit MK's IP56 Masterseal power outlets using the flush-fit flange box, developed by MK, to provide power and/or data outlets directly on the pillar.

The mock-up shown here demonstrates perfectly the installation options available when using the Masterseal range.

Masterseal is available in white or grey finish and is often installed, as in this case, with BS 4343 industrial plug and socket systems.

Masterseal - another product of excellence from MK!



Product News



Playing the Options in Cable and Data Management

Bringing power and data services to work-stations in the office, factory, hospital, school, hotel or home has always challenged the specifier not only because the options are so numerous but because actual user needs are inevitably going to change.

Functional performance, with plenty of growth capacity, and system security will always be the first priority in specification of wiring installation designs especially in the main feeder and distribution services. However, once the services reach the work-station area, there are widening options which need evaluation.



Prestige Plus: with secure corner piece

Channelling all services through the floor and onward to work-stations through floor boxes, desk units or pillars will provide the preferred choice in many new construction projects, especially where the end-user needs are established in advance. However, in many so-called 'speculative' new-build office projects, where space is to be rented out to companies as yet unknown during construction to the building's owners, then tertiary (work-station area) wiring provision can only be provisioned approximately and to a general specification.

Where new-build projects are of this latter type and even more so for major refurbishment projects in existing buildings, then wiring services must be managed with considerable flexibility using adaptable cable management systems. These days the average life of office automation software and facilities is only about 4 years before part or all is reconfigured.

This is where surface-mounted perimeter and individual work-station systems can come into their own. Whether designed and fabricated in metal or plastic materials, surface trunking systems are inherently adaptable in configuration and performance. They will conform to wall, partition, desk or work-station configurations and be fitted exactly on site to meet customer requirements precisely. At the same time, their power and/or data services can be routed, partitioned and protected as required and outlets located per user needs.

The MK range of surface cable management enclosures is designed to deliver distribution or perimeter trunking in as many as eight formats ranging from simple single compartment systems to more sophisticated and adaptable triple compartment systems with data separation and screening options as required, as well as, in the latest systems, the appropriate bend radii for Category 6 and higher data services. These MK systems are designed for dado or skirting level installations.

For example, some recent new product additions to the MK Prestige Plus range include enhanced data friendly fittings compatible with the needs of Cat 6 structured data cabling.



Prestige Plus: special radii formats

These include flexible corners that provide 10 degrees of movement (90 degrees plus/minus 5 degrees) so as to accommodate building irregularities; moulded flat

angles and tees incorporating Cat 6 data cabling compliant radii; overlapping covers which negate the use of couplers when joining to the trunking - and a styling that makes the whole range totally compatible with MK's Logic Plus wiring accessory range - see below and left.

In fact, the 'MK Prestige range is the flagship of the MK surface trunking offering (also available in aluminium), along with such other aesthetically pleasing ranges as Prestige 2com and Powerlink Plus which feature stylish contouring and comprehensive accessories for full power and data services, required separation and practical cable management. The designs offer future-proofing as additional cabling and outlets can be readily accommodated without major disruption or lost working time.

For laboratories, clinical work-stations and training establishments there is also the option of Pinnacle, MK's bench top cable management system, which can provide multiple systems and outlets directly in front of the user and facilitate thereby frequent changes in usage.

Whatever the system selected or colour preferred (up to 180 colour options offered in some ranges), MK Cable Management provides answers to

tertiary cabling design where flexibility, good aesthetics and practicality are sought. MK Wiring Devices complement these systems particularly well, especially as the finishes for white cable management systems and Logic Plus wiring devices are very well matched.

So there are plenty of options for both the customer and end-user as well as for the specifier and installer and all from MK Electric. Why not ask for more information and see the ranges for yourself at KEC's showrooms.....

'MARTINI' Lights Up Its Target Market

One of Italy's leading quality lighting companies - **Martini S.p.A** - with whom **KEC** has been building up an excellent and successful partnership, staged a highly successful lighting seminar recently, targeted at a specially invited audience.

With the emphasis on *lighting design*, the guest list included leading architects, interior designers and M&E consultants from the local fraternity.



Walkie Talkie 65 LED

The extensive **Martini** lighting range includes solutions for *both* outdoors and indoors - with the emphasis on life, reliability, quality and light design.

Martini has steadily developed a well-known reputation for manufacturing products which



have a high performance and excellence in construction quality.

Martini's priority is also to provide a range of products that is designed to assure the *right* solution to the demanding needs of the architect, engineer or lighting designer - whilst taking into careful consideration modern design essentials such as energy saving, comfort, eliminating light pollution, non-invasive fixtures and low maintenance.

Whether it is for outdoor or indoors, the **Martini** product offering is extensive. From lighting solutions such as,

Sax – for interior track lighting

Witra – a range of recessed fittings suitable for display

Rolo – professional adjustable floor lamp fittings, or

Walkie Talkie 65 LED - a range of IP68 signal lighting fixtures



Novi Palo



Profido

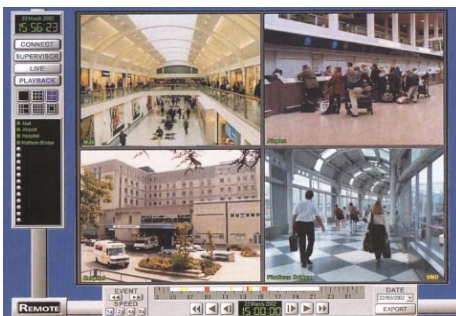
there is the possibility of incorporating the most advanced and popular light sources for maximum expression and in various application choices: halogen, fluorescent, metal halide and sodium vapour with, these days, a particular emphasis on LED technology. The **Martini Group** has invested considerably in LED product research and development - and is now a leading company in the sector.



Martini - Quality in Light

visioprime Enhances CCTV Product Features

VisiOprime - one the *leading* UK players in CCTV system solutions - has enhanced recently its DVR [digital video recorder] by introducing two new features :



- The DVR will now accept - via an Ethernet port connection - up to 16 IP [internet protocol] cameras at no extra cost. So in future if, for example as a late addition, the local installation contractor is asked to install IP cameras, these cameras would just be hooked on to the client's IP network and the VisiOprime recorders would pick up their signals - *with no additional software needed*.

- VisiOprime [DVR] recorders also now have as standard '*Intelligent Camera Sabotage Detection*' i.e. if a camera is deliberately defocused, sprayed, blocked or shaken, the VisiOprime software picks this up and lets the user know there has been interference on the installation.

Call our KEC Systems SolutionsTeam to discuss your next CCTV application on Tel: 398 5580 or email them at kecsystems@keckuwait.com

Brand-Rex

10GE Overview



Which cabling products should be installed to future proof for 10GBASE-T?

At this time a conservative approach to cabling for 10GBASE-T is advised. 10GBASE-T is a new high speed application which is being developed to run mission critical business management applications in server areas: 10GE will run in the core of the network.

10GBASE-T is a complex code requiring higher bandwidths than current applications which will run over structured cabling. 10GBASE-T is not a technology to take unnecessary risks with. The selection of cabling product to support 10GBASE-T is a currently a live issue because cabling systems are installed for future-proofing and 10GE products are expected to arrive in the 2005/2006 time-frame.

So decisions need to be made now on cabling system choice (note: it has been postulated that the 10GBASE-T application will not emerge in horizontal cabling areas until 2010 at the earliest, although it may be adopted in network backbones sooner). There are a number of technological issues associated with electronics and cabling which require resolution before this new application standard is firm and, consequently, before products can be assessed and developed which can be claimed to be 10GBASE-T compliant. Reference to reports and information in the public domain from the 802.3an Task Force shows that the standards are not stable and that the baseline specification is not yet agreed. At present, 10GE compliant products do not exist and warranties for the performance of installed products to support 10GBASE-T can only be given by declaring constraints and exceptions against undefined standards.

At the outset of the project one of the original objectives of the 802.3an Task Force was to select cabling solutions from those currently available in ISO/IEC 11801:2002, these include Class D, E and F cabling. Whilst a Category 7 system would seem an obvious choice, the MDI connector in the 10GBASE-T hardware will be an RJ45, so Category 7 connectors will not interface with active equipment. RJ45 solutions are required. RJ45 based Category 6 performance products are standardised but they are not characterised to 500MHz (the current agreed upper frequency for 10GBASE-T).

Also, Cat6 UTP cabling systems are length limited by the 'alien' noise from other cables and show a poor performance in a noisy electromagnetic environment (EMI). Cat6 screened systems are an obvious choice for cabling for 10GBASE-T (noting that they are bandwidth limited).

What are the implications for existing and future cabling installations?

Installed, or Legacy Cabling:

To understand whether or not legacy cabling installations will be able to run 10GBASE-T when it is standardised as an application, and when the cabling specifications are agreed, and when the test capability becomes available, existing Cat6 and Cat7 cabling installations should be characterised by field testers to the new 10GE limits. Cat6 screened systems and Cat7 systems should be good for 10GBASE-T if the products pass the field test. However, with Cat6 UTP cabling there are other issues:

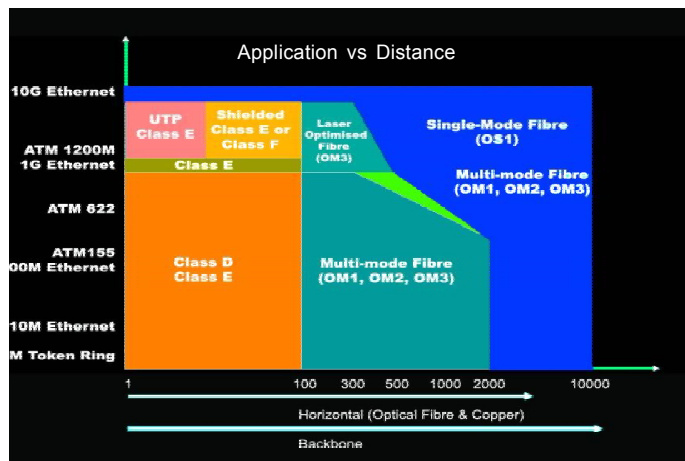
- Consideration should be given to restricting run lengths to 55m, to design the system against noise picked up from other cables
- On site Alien noise measurements may be required to assure that the cabling system is compliant with the specification requirements
- Alien noise mitigation methods may be required to change the cabling installation layout to improve its Alien noise performance
- Installers and installation owners, must be made aware that 10GBASE-T applications running over UTP will be at risk in a noisy EMI environment.

New Cabling Installations:

In the future, when 'Cat6e' or 'augmented Category 6' products arrive, they will no doubt prove a viable option but they are not available today. Whilst the development of the 10GBASE-T application started in November 2002 as a study group in IEEE the development of the Cat6e standard of performance for cabling systems has effectively just started in the IEC committees (it is more advanced in TIA committees), so completion of the new IEC cabling standards cannot be expected before 2006. The cable of choice in the future may be a UTP product but the robustness of an installed UTP system for 'cable to cable' and EMI noise effects will still need to be assured by field test or by design, to demonstrate its fitness for purpose.

Currently new cabling installations, which may be anticipated to run 10GBASE-T, run less risk *if a screened system is deployed.*

**Brand-Rex
Recommends a
Shielded Solution
for 10GBASE-T**



Brand-Rex 10G Solution

Millennium 10G BASE-T Solutions: Cat6Plus Shielded Solution for 10G BASE-T Application

Brand-Rex

Brand-Rex Cat6Plus screened cabling is recommended as the product of choice for cabling installations which must conform to ISO11801:2002 and which may be required to transmit the developing 10GBASE-T protocol.

Brand-Rex Cat6Plus screened cabling is certified as a Category 6 performance product: it also has an operational performance beyond Category 6 limits which will allow it to be used for higher operational bandwidths.

Cat6Plus

Cat6Plus is a premium performance Category 6 cabling system from Brand-Rex. The products are built on IPR generated by Brand-Rex and are manufactured in ISO9001 approved facilities. Performance of the individual products and the system are independently verified by a third party test house - 3P Testing, Denmark.

Brand-Rex also offer a system warranty if the product is installed and verified according to Company guidelines.

Cabling Standards

The Cat6Plus product is available in screened or unscreened (UTP) variants: both systems offer headroom in performance over the International Standard Category 6 performance specifications (ISO11801:2002, CENELEC EN50173-1:2002 & EIA/TIA568B2.1).

The ISO, CENELEC and TIA committees are currently drafting new standards to define the transmission performances required from cabling systems to run 10GBASE-T when it becomes available. These standards are not finalised and are not yet published.

10GBASE-T

The 10GBASE-T application being written by the IEEE802.3an Group requires a 500MHz operational bandwidth from the cabling installation and the application will use a more complex coding structure than previous generations of Ethernet (a bi-directional, 2.5GBps/pair, DSQ-128 constellation coding is currently preferred).

At the time of writing this note the 802.3an standard is at Draft 1.2 and is subject to further change.

Existing Cabling

Where Brand-Rex Cat6Plus has been installed and the user wishes to rate it for 10GBASE-T, the cabling should be tested and assessed against the 10GBASE-T specification and link re-configuration and ANEXT mitigation used where appropriate (see separate installation guidelines).

UTP and 10GBASE-T

Brand-Rex Cat6Plus UTP systems are also suitable for 10GBASE-T. However, Brand-Rex recommend that UTP systems should be limited to 55m link lengths because of the problems anticipated with alien cross talk from adjacent cabling. Brand-Rex also advise that due care should be taken to assure that the EMI noise will not limit the system performance.

Note: In new installations, for ISO11801:2002 and 10GBASE-T, Brand-Rex Cat6Plus UTP systems are recommended to be limited to interconnect cabling configurations, such installations would require the use of modular panels with snap-in jacks.

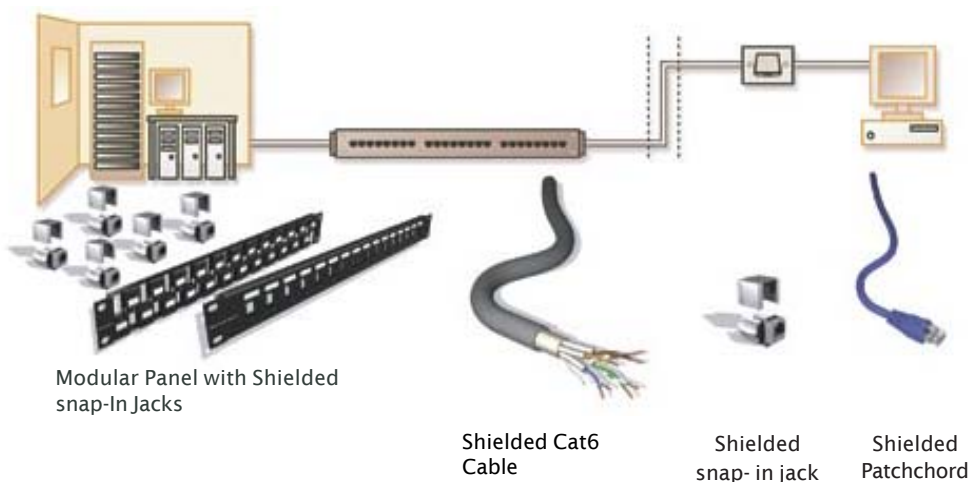
Brand-Rex Recommendations:

Today, for new installations, the best selection of cabling media to prepare for running the developing 10GBASE-T application is a screened Cat6 solution; it is the most compelling choice for a variety of reasons and should be recommended.

Brand-Rex Cat6Plus screened cabling is recommended as the product of choice for cabling installations which must conform to ISO11801:2002 and which may be required to transmit the developing 10GBASE-T protocol.

Brand-Rex Cat6Plus screened cabling is certified as a Category 6 performance product. It also has an operational performance beyond Category 6 limits which will allow it to be used for higher operational bandwidths.

Shielded Cat6Plus Recommendations





Dimming. MK Has the Answer

'MK' has the answer with a complete range of dimmers in matching plate finishes but some care and attention is required in order to get the best results writes MK's Mike Martindell - Product Manager and Jawarhar Mehta - Regional Technical Manager, Middle East

Dimmers are essential for control of light level and switching of light fittings in residential, public and commercial premises and are now a highly popular feature and fashion statement in many a villa or home here in Kuwait.

Dimming gives the following advantages in the efficient use of artificial light sources:

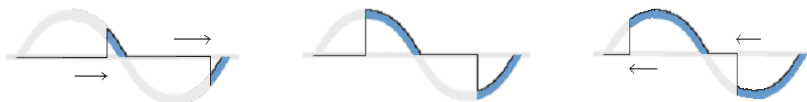
- ◆ Reduces energy consumption in usage (immediate payback)
- ◆ Extends lamp life and increased safety
- ◆ Creates the right ambience and mood setting depending on task e.g. reading, watching TV etc.
- ◆ Creates elegance, drama, effect and a feeling of comfort.

A wide variety of lighting sources exist on the market. Each light source has individual characteristics, which require special types of dimmers. It is important to use a dimmer that is designed and tested for your specific light source.

Dimmer Operation

Dimmers work by electronically switching on part of each alternating mains cycle. The amount of the mains cycle that is switched on is varied to produce more or less power in the load. This variable control of switching time is called phase control.

Leading-Edge dimming



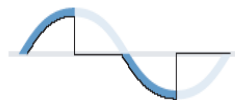
Dim

Medium

Bright

Leading-edge dimmers switch on part way through each cycle, so there is a step up in the voltage in each cycle. Most dimmers are leading-edge type.

Trailing-Edge dimming



Trailing (or lagging) edge dimmers allow the beginning of the mains cycle through, but switch off with a voltage step nearer the end of each cycle.

Dimmer Designs

Basic or Standard Dimmers

Basic dimmers are low cost, use simple internal circuitry and are suitable for resistive loads like mains incandescent lamps.



Dimmer from MK Aspect range in polished brass

Microprocessor-based Dimmers

Microprocessor-based dimmers are more expensive but have a lot of advantages;

- 1) they usually include overload detection and safe shutdown, as in Intelligent Dimmers
- 2) they have a high tolerance to non-resistive loads, such as low-voltage lighting transformers

Types of Light Sources with Dimming solutions



Incandescent:

These are lamps that have a resistive filament, which produces light by the effect of heating. They operate on mains voltage and can be dimmed by traditional small plate dimmers. Typical lamps are GLS, incandescent and mains tungsten halogen. Incandescent lamps can be dimmed satisfactorily by any of the types of dimmers described earlier. Standard dimmers are the most cost effective.



Low Voltage Halogen with Magnetic Transformers (MLV):

Low voltage lighting uses a transformer to reduce the mains voltage to 12V or 24VAC; this low voltage is then used to power incandescent low-voltage lamps. Typical examples of low voltage lamps are AR111, MR16, MR11, PAR36, T3-1/4, T5 lamps. The transformer may be mounted remotely or as an integral part of the fixture.

Dimming. MK Has the Answer (continued)

'MK' has the answer and the range to cover the majority of needs.....

For dimming LV halogen lamps with a magnetic transformer, the dimmer is always in the primary circuit of the transformer, controlling the line voltage input to the transformer. The circuit characteristic seen by the dimmer is inductive, which often causes problems with basic dimmers. When dim, the voltage steps in the mains cycle create oscillation problems in the circuit, and the triac switching device in the dimmer switches off unpredictably. As a result, you see irregular control as you turn the dimmer up or down and flickering in the lights. A microprocessor-based or "intelligent" dimmer has better control of the triac switching and flickering is prevented. Good quality transformers also help prevent flickering under dimming control.

Both incandescent and low voltage halogen with magnetic transformers can be combined on one dimming circuit, as long as the total load (including transformer losses) does not exceed the dimmer capacity.

All LV transformers should be equipped with a primary fuse or an internal thermal fuse to protect against overheating and overload.

Check the dimmer technical details for the maximum number of transformers that can be connected on one dimming circuit and remember that LV lamp transformers add an additional 20% to the load. For example, a 500W dimmer will only handle up to 400W of low voltage lighting through transformers.

Low Voltage Halogen with Electronic Transformers (ELV):

Electronic transformers are another way of reducing line voltage supplied to low voltage lighting. An electronic transformer uses high frequency switching and a small isolation transformer built inside the unit.

Electronic transformers are compact and lightweight, have a higher efficiency compared to magnetic transformers but have a shorter life. Again the dimmer is always in the primary (mains) side of the circuit and the circuit characteristic is capacitive.

Most electronic transformers require trailing-edge dimmers for control but some models can also work with the more common leading-edge dimmers.



Dimmer from MK Insignia range in antique bronze

Always check the specification of the electronic transformer before specifying the dimmer. MK dimmers are only suitable for leading edge, dimmable transformers.

In Summary

Dimmers are a highly desirable feature of modern living and help to create just the 'right' atmosphere, when entertaining, for example, while straightforward to install and use, *but* take care when using with low-voltage halogen lighting.

1) Do not use basic low cost dimmers with low-voltage halogen lighting, where there is a high risk of unwanted interaction between the transformer and dimmer. Problems can include excessive dimmer buzz, fixture buzz, lamp flickering and erratic dimming behaviour.

2) When specifying electronic transformers or ballasts, check what type of dimmer can be used with them.

3) Do not overload a dimmer with low-voltage lighting. For example a 500W dimmer will only handle 400W (400VA) of low voltage lamps.

All MK dimmers comply with BS EN 60669-2-1 and BS EN 55015.

For more product information please refer to the MK Wiring Devices Catalogue.

The MK Dimmer Range



MK, as market leader in wiring accessories, offers an extensive range of dimmers with matching plate finishes, ranging from white plastic to ultra-slim screwless front-plates. It takes its responsibility seriously by going to great lengths to train and educate MK regional personnel and its channel partners in installation practises.

For example, appropriate written advice providing guidance to installer and specifier/designer - in both English and Arabic - is supplied with each individual dimmer purchased via KEC's 'MK Boutique' showroom in Kuwait.

Technical expertise combined with a breadth of choice of functionality and appearance is the *essence* of the MK proposition.

Technology that still works where nothing else does!

CEAG Emergency Lighting Systems

Klaus Vatter CEAG Germany's Managing Director alludes to the benefit and features of an installed addressable emergency lighting system - a growing application trend here in Kuwait. There is an excellent, growing partnership between CEAG, a member of the global Cooper Industries Corp. and KEC.



Safety is the invisible precept in shopping centres, exhibition halls, airports, hotels, cinemas... Almost all these facilities rely on this.

A technically perfected CEAG Emergency Lighting System offers safety standards to ensure that people in frightening situations can orientate and rescue themselves at all times. Especially, when surroundings are unfamiliar or when the power has failed: *the CEAG systems also work in those cases you would rather not even think about.....*

For over 30 years, CEAG has been driving innovation in Emergency Lighting Systems and Solutions and in turn has won international recognition as well as market leadership in the UAE - with projects such as the new Madinat Jumeira Hotel and the Burj Al Arab to its credit, to name but a few, and here in Kuwait more recently, the new Holiday Inn Hotel at Ras Salmiya and the new Shaab Beach Club.

CEAG's target is to improve functionality, reliability and user-friendly handling continuously. CEAG's motto is: *in case of emergency each luminaire can save human life.*

A First.....

With the implementation of Ceweguard, CEAG is the *first* company providing single monitoring of each luminaire, self-contained and slave luminaire in central battery systems. The function of the luminaires and the central battery system is checked daily and the results are monitored at a central panel or even remotely.

Plant in Soest, Germany



The latest development from CEAG is the **Star-Technology** for central battery systems. Users achieve significant advantages when using this technology including:

- Hybrid operation of all switching modes within a single circuit, maintained mode, non-maintained mode and switched-maintained mode.
- User-friendly control unit, three separate test keys and three user assignable function keys, plain text display on the control module down to the last luminaire.



STAR-Technology in central battery systems

- Flexible data storage for log book. The results of the daily function tests and battery tests are stored and the user can easily show to relevant authorities that he took care for the equipment and which corrective action he took.
- Configuration with smart media card. It is convenient to configure Emergency Lighting for the site on the computer, store the result on the smart media card, insert the card into the control unit and then the card will configure the complete system without additional work.

- Visualisation of the system with CG-Vision. The configuration can be shown remotely with CEAG's user-friendly CG-Vision software. With this software, additional building management integration is possible.

- Ethernet

With the latest development of intelligent components for CEAG Emergency Lighting Systems with STAR-Technology, it is even possible to use popular computer networks based on Ethernet for communication. So it is possible to communicate easily via Intranet or even Internet. That means a considerable reduction in installation and maintenance costs. Furthermore it ensures a high operating safety due to permanent supervision from the local IT-department.

- LON

All communication and connections between the CEAG Emergency Lighting Systems to the visualisation (CG Vision) or a BMS are based on the widespread LON WORKS® technology. This defines a new standard for Emergency Lighting Systems in the modern technology of communication.

The STAR-Technology of CEAG has significant advantages over standard technology. It is user-friendly and provides you with all required technical solutions from standard to high-end with Ethernet and LON integration. CEAG's Star-Technology increases safety for all kinds of building - technology that still works where nothing else does.

CEAG: the *only* name in intelligent emergency lighting solutions to reckon with.

*Need design assistance for your next project to feature the very latest addressable emergency lighting solution?
Contact the KEC Systems Solutions Team on
Tel: 3985580 or email kecsystems@keckuwait.com*



Quantran Dimming Leads the Way

Quantran Dimming Solutions have been leading the way of late in the market place - via their unique partnership with KEC - by recently securing the dimming solution contract for the prestigious Kuwait Manshar Rotana Towers Hotel.

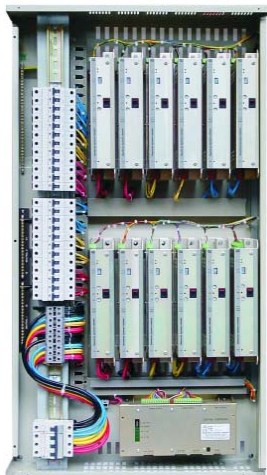
"Equally inspiring has also been the successful award of a number of VIP villa contracts in recent weeks," comments KEC's Rajan Peter.

Already brand leaders in several regional Middle East markets, **Quantran** dimming systems are noted for several unique superior technical features which include:

Multi-channel microprocessor based dimming solutions using solid state electronic proximity-activated Touch Pad programmable control plates and interfaceable to PC/AV systems.



The Kuwait Manshar Rotana Towers Hotel



24-Channel Dimmer Rack

Merlin Range dimmer modules to suit small applications, and



5 Scene Push Button Control Plate



9 Scene Touch Pad Control Plate

Centralised programmable lighting control systems.

Moreover, the **Quantran** brand is uniquely supported by a fully-fledged electronics engineer - Anish Arora - as resident engineer based here in Kuwait.

"With **Quantran Dimming Solutions** on display at KEC's 'MK Boutique' showroom in Sun City there's never been a better time to come and have a look at what a **Quantran** solution can do for your forthcoming installation" added Rajan Peter 'or you can call our Technical Support team on Tel: 3985580.'

Register now for our forthcoming Quantran technical seminar by calling our Technical Seminar Hotline on Tel: 3985580

Quantran - 'The Total Dimming Control Solution'

KEC Welcomes Key Cooper Regional Personnel in Cooper Lighting Initiative

KEC's General Manager, Hazem Al Nouri recently had the pleasure of welcoming Cooper's Regional Managing Director - Duncan Harding and Omar Istwani, Cooper USA's newly appointed Regional Lighting Manager, during their recent visit to Kuwait in order to spearhead a major Cooper Lighting initiative and tie-up with KEC.

'We are delighted to be working with Cooper in expanding and complementing our commercial lighting proposition over the coming months,' added Hazem Al Nouri.

"Cooper already have a significant presence in the USA market and with a number of regional Middle East projects having been secured in recent months, we are excited at the prospect of forming a successful partnership together for the Kuwait market as a platform for further growth".

For details of the Cooper product offerings see page 3.

Right: KEC's Hazem Al Nouri welcomes Cooper USA's Regional Managing Director - Duncan Harding (center) and CEAG's new Regional Lighting Manager - Mr. Omar Istwani (right)



A Fond Farewell to One of MK Cable Management's Regional Pioneers



KEC recently had the pleasure of saying farewell and a healthy and happy retirement to one of the region's MK Cable Management pioneers - Rodney Kemp: MK Electric's [and formally EGA's] International Business Manager.

Rodney first visited Kuwait more than 24 years ago in pursuit of promoting EGA's fledgling PVC cable management business and has been closely involved in the region ever since. Overall, Rodney has been in the industry for more than 30 years with many achievements. He was, for example, a key party to the establishment and development of the very successful Saudi Ega Cable Management business.

'We were delighted to have the opportunity to say bon voyage to Rodney,' noted KEC's Peter Woods 'and to pay tribute to his contribution to the comprehensive product and services offering as well as the excellent growth of MK's Cable Management range over the years.'

KEC's Hazem Al Nouri saying farewell to Rodney Kemp, MK's International Business Manager for Cable Management

Award Winning KEC!



KEC's Rajan Peter wins 'Best MK Channel Partner Salesperson of the Year' in Kuala Lumpur, Malaysia

KEC's Rajan Peter won the prestigious '**Best MK Channel Partner Salesperson of the Year**' award at the recent International MK Wiring Device and Cable Management Conference involving more than eighty guests at the 5 Star Hyatt Regency Saujana Hotel in Kuala Lumpur, Malaysia.

The annual event, which is held as a platform to recognize personal achievements, to launch this year's *exciting* new products *and* to provide a forum to discuss the latest regional market trends, *also* awarded KEC with a special award of '**Best Channel Partner Marketing Initiative Award**'. This in itself provided a testament to KEC's efforts in producing marketing communication activities such as this very latest edition of the 'KEC Newsletter'.

"We are extremely honored to receive these two awards which truly reflect the major efforts which we as a team have made these past 2-3 years to bring a strong boost to MK's market share," added Rajan Peter.

Congratulations Rajan & keep it going!

Exciting MK-KEC 2004-05 Cricket Season in Association with Gulf Consult

A presentation hosted by one of Kuwait's leading architects, planners and consultants - Gulf Consult - signalled an exciting finish to the 2004-2005 MK-KEC cricket sponsorship season.

Aimed at new and emerging cricketers in Kuwait, this season's matches consisted of eighteen participating teams divided into three groups. Successful teams in the finals were the Star Sports, captained by Mohammed Sajjad Butt who won the Cup Round Winning Trophy, with the Man of the Match award going to Mohammed Afzal, and the Al Mulla team captained by Imran who won the Plate Round Winner Trophy.

The prize giving was attended by many of Kuwait's senior cricket administrators and dignitaries.

Jeff De Lange MBE, Gulf Consult's Deputy Managing Director - *pictured right* - presenting KEC's Peter Woods and key members of the KEC team with a memento of the year's event - took the opportunity to thank KEC and MK Electric for their active participation and sponsorship and paid tribute once again to 'the unique partnership in the Kuwait construction industry which aims to help develop Kuwait's young cricketing enthusiasts and raise overall cricketing standards.'



KEC wins CargoGulf Award



On the 20th Anniversary Celebrations of CargoGulf, which was held in February 2005 at the Jumeirah Beach Club in Dubai, KEC was awarded a plaque for its co-operation and support to Gulf Agency Company Kuwait.

Gulf Agency in Kuwait are the cargo agents for Davis Turner UK through whom MK Electric products have been shipped to KEC for nearly a decade.

KEC is one of the three companies that have received this award, which was presented to Mr. Khawar Mumtaz Bhatti (extreme left) - KEC's Sales Administration Manager by Mr. Patrick Hallden, General Manager (centre) and Jerry Fernandez (extreme right) - Sales Manager, Sales Logistics of Gulf Agency Company.



New MK Electric International Business Director Appointment

KEC recently had the pleasure of welcoming to Kuwait MK Electric UK's new International Business Director - Jeffrey Youssef - and his accompanying colleagues - Rodney Kemp and Dilip Sinha.

The brief visit - a first for Jeffrey Youssef who is based at MK's HQ in the UK - provided an opportunity to review the significant growth in both MK Wiring Device and Cable Management volumes that has been achieved by KEC this past 2-3 years in association with the regional MK Electric team based in Dubai. Also discussed were up-to-date plans for yet further expansion over the months ahead supported by an exciting programme of new product launches.

"The KEC:MK Electric relationship celebrates its 30th anniversary next year - 2006," noted KEC's General Manager, Hazem Al Nouri.



KEC's GM Hazem Al Nouri welcomes MK Electric's Jeffrey Youssef, Dilip Sinha & Rodney Kemp during a recent visit to Kuwait.

**Call the Sales Team in KEC on
Tel: 3985580 at the following extension
numbers..**

Peter Woods	111
Rajan Peter [mob: 9061578]	128
Sales Admin. & Customer Services	
Khawar Mumtaz Bhatti [mob: 9664518]	123
Zoheb Ansari	125
Sundari Kumar	129
Karuna Leah	135
Alex Gomes	122
Systems Solutions & Commissioning	
Gee Thomas Varghese [mob: 9365160]	127
Ralph Vieira [mob: 9123203]	118
Sumitha Yuges	130
James/Shaji (Technical support)	131
Brand Rex Structured Cabling and Data Systems	
- Puga Sundararajan [mob: 9838303]	124
Ceag Emergency Lighting Systems	
- Hyderali K.	144
Quantran Dimming Systems	
- Anish Arora [mob: 7648338]	146
- Bijoy K. Rajan	143
Our MK Boutique & Technical Lighting Showrooms in Sun City : 2241114/5	



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Did you know that 70% of Cat 5e & Cat 6 patch cords fail to meet even Cat 5e performance?

Aesthetics are no indication of quality:

The use of a modern field tester with a complete patchcord test adapter, will not only reduce your network fire but also confirm that you made the right choice of patch cord. Minimise the risk of causing harm to your network by installing Brand-Rex standards based patch cords. Network failure risk will increase with the implementation of Gigaset Ethernet, so ensuring that you have standards compliant Cat 5e or Cat 6 patch cords is now essential. The symptoms of a poor performing network will be high bit errors. Brand-Rex patch cords are compliant with EN 50173-1:2002, EN 50173-2:2002 and EN 50173-3:2002. **Make sure that standards based compliant products are a prerequisite for your network.**

Choosing Brand-Rex patch cords will mean that you will have a healthy and compliant system.

Brand-Rex PATCH CORDS - The Educated Choice

Brand-Rex