
The Friends Arena will play host to a variety of events; its standard football layout can easily be converted into various concert and event formats with different capacities. The standard capacity of the stadium is 50,000 seats, which is divided over three tiers. The maximum capacity for concerts is 65,000 and world-class acoustics ensure a great experience for ticket holders. Artists already confirmed are Kiss, Iron Maiden, One Direction and Bruce Springsteen. Other events include Speedway, Ice Hockey, Horse Show Jumping and the UEFA Womens’ European Final.

**The Requirement**

A completely new stadium was being built that had to provide a home for the Swedish National football team and also be able to change quickly into a venue for other major events. The technical solutions being installed into the building demanded a category 6 network to host these technologies to ensure they would work to the best of their capabilities.

Hanging from the roof is a media cube with four screens 65sqm each and weighing 64 tonnes. In addition there are 647 LED screens that enhance the visual experience along with a state or the art sound system. WI-FI covers every seat and allows guests to share their experiences with the rest of the world as it happens.

The standard star topology structured cabling infrastructure supports a wide range of technology well beyond the pure IT requirements of the facility. From the Main Control Room, they are able to control a combination of security cameras along with access control, both internally and externally, ensuring the safety of the visitors. It also provides state of the art communication links to the world’s press in a dedicated facility to get their stories out to the world.

**Sourcing a Partner**

Once Friends Arena had recognised their requirement, they then needed a solution partner to help them source the right products and also install the new system. Midroc was chosen due to their experience in working with companies primarily in the property development, property management and industrial and environmental contracting sector.

Midroc worked closely with Solar to ensure that the project had the right electrical and data products and could be completed within the specified time frame.
Solar is one of Northern Europe’s leading technology vendors, having multiple branches across Scandinavia, Poland, Netherlands & Germany. Solar added value in the supply chain by offering the best logistics solutions available and a dedicated experienced project support team.

Working together both Midroc and Solar decided that the Excel product range was the best solution for the project. Excel is a complete, end-to-end networking solution, offering exceptional performance, reliability and support, manufactured to European quality standards and covered by one warranty. Solar is an established distributor for the product range throughout Sweden and Excel has been part of the company’s product portfolio for the last four years.

**The Right Product**

The Excel product range met the technical requirements of this project, fitting the bill perfectly. Midroc knew that they could get the large quantities of stock that was required via Solar in a short period of time. Solar operate a modern and automated central warehouse reassuring Midroc Electro that the products would be delivered to the right place at the right time. In fact Solar guarantee that orders placed before 6pm will be delivered by 7am the next working day.

**Design and Installation**

Category 6 Unscreened (U/UTP) cable was installed in the new Arena. This cable is designed for optimal support of High-Speed data protocols delivering 1 Gbps performance. Designed to be quick and easy to install, the cable requires no specialist installation tools.

The Excel toolless jack is one of the simplest methods of providing a high level of repeatable quality fast termination. Suitable for both traditional and pre-terminated installations, each jack has a standard RJ45 keystone jack footprint. These jacks were loaded into keystone jack patch panel frames. These frames come with a rear management tray which has purposely designed cable tie positions supplied with each panel, which can be fitted without the need for any tools or fixings by simply snapping them into place.

One of the greatest challenges Midroc came up against was ensuring that they delivered a standards compliant system in a timely manner. The project had to be completed within extremely tight deadlines as events such as concerts and football matches had been booked to take place and could not be rescheduled or delayed in anyway.

Employing this modular system assisted Midroc to meet the tight deadlines in place and also provided a standards compliant system.

Excel offers proven standards compliant products, with third party independent verification from test houses such as Delta and 3P. Third party verifications are an independent ‘tick in the box’ verifying either a product or a set of products’ compliance with a particular standard.

The installation took place throughout 2011-2012.

**The Result**

Friends Arena has access to a high bandwidth network which is being used for their IP telephone system, SCADA along with Wi-Fi and IPTV. The structured cabling infrastructure installed also runs security cameras, access control systems, point of sale systems and provides a dedicated link for the press, all competed on time, first time.