# Case Study

# L-com Provides Connectivity Solutions for NJ Transits Light Rail Car Deployment



# **Customer Profile**

Customer: Kinki Sharyo Location: Jersey City, NJ Industry: Transportation

# Challenge

 Provide a robust cabling solution to support video display and LED lighting systems for sixty light rail vehicles

#### Solution

 Off the shelf armored USB cables, off the shelf right angle Cat5e
 Ethernet and DVI cables

#### Results

 Successful implementation of new light rail car digital signage and lighting systems for NJ Transit

# Challenge

Kinki Sharyo has been customizing solutions for urban transit agencies worldwide for as long as there has been urban transit. After designing and manufacturing more than ten thousand railcars, they continue to build on the heritage of technological innovation and customer service that have made them the #1 supplier of low-floor light rail vehicles in North America. Kinki Sharyo knows that each metropolitan area and transit system has needs beyond moving people safely and reliably. They tailor solutions to meet those needs. From manufacturing to maintenance, from Dallas to Dubai, Kinki Sharyo delivers a full range of customer-focused, customized products and services that set them apart.

Kinki Sharyo was awarded a \$30 million contract from NJ Transit for sixty new trains for the Jersey City, Hoboken, Newark, and Hudson County NJ light rail vehicle line. The new car design will utilize DVI, Cat5e and USB cabling to enable onboard video and LED lighting systems. The existing connectivity method uses heavy gauge cables bundled together and terminated to a large 60 pin Canon connector. The train cars are articulated with 3 to 5 cars connected to each other. Due to the constant flexing of the cables, they frequently wear and experience failures at the friction points.

Kinki Sharyo's challenge was to find a more robust cabling system that would not wear down over time due to the constant movement of the articulated cars.

#### Solution

L-com sales provided Kinki Sharyo engineers samples of its ruggedized, crushproof USB cables as well as right angle DVI and Cat5e Ethernet cables as space is limited on the rail cars. After testing the cables Kinki Sharyo found that the cable assemblies met all of the requirements for the new rail car design. Furthermore L-com's cables were available, off the shelf, with Low Smoke Zero Halogen (LSZH) jackets and connector over molds which was also a requirement of Kinki Sharyo in order to protect people and equipment in the event of a fire.

#### Results

L-com's off the shelf cabling solutions met Kinki Sharyo's requirements for a robust, high performance video display and LED lighting system for the NJ Transits new light rail car deployment.

