

Why Gepco®?



GARY GEPPERT AND GEPCO – A HISTORY OF INNOVATION

It's a classic and inspiring story—starting a successful business with only garage space and a big idea. In 1981, Gary Geppert did just that when he launched Gepco from his Northbrook, Illinois garage. The idea sprouted two years earlier while Gary was recuperating from a near-death motorcycle accident. Having worked as a recording engineer and a technical operations manager at two of the major studios in Chicago, Gary had been exposed to all facets of the industry regarding both fixed-based and remote-location recording. With time off from his career to mend and plenty of time to think, Gary came up with a concept for a Multi-Pair Audio Cable design he thought could revolutionize the Broadcast industry.



Gary working the console at Paragon Studios in 1975.

THE PROBLEM

Wire products for the Broadcast industry, at that point, were hand-me-downs from either the Telco industry, military or electronic instrumentation. None of the big wire manufacturers really understood the needs, wants or electronic problems of the network studios, major recording studios, video editing suites or Outside Broadcast (OB) vans. So at that time, everyone was using multi-pair audio with individually shielded pairs and color codes. Individually shielded pairs were messy and required the application of shrink tubing, while the pair proximity caused crosstalk. When using conventional color code identification, it was easy to make mistakes and accidentally skip a pair in the color group or invert the pair and flip the colors. This was especially true in large

installations where time constraints were an issue and installation crews were suffering from sleep deprivation. Radio frequency interference (RFI) was everywhere in downtown Chicago, and virtually impossible to eliminate. Grounding of equipment required running a separate wire to each piece.

So the idea for Gary's new multi-pair cable design came out of sheer need and desperation to solve four major problems when wiring recording or broadcasting facilities: crosstalk between adjacent pairs, phase wiring errors, radio frequency interference (RFI) and ground loops.

THE SOLUTION

The crux of Gary's idea was simple: jacket the shielded pairs to prevent crosstalk and number the pairs for

easier identification. The jacketed pairs kept things nice and neat, eliminating the need for shrink tubing, while pairs were identified with alphanumeric print alternating from right-side-up to upside-down so the legend could be read no matter which way the cable was pulled. With a familiar black and red color scheme for the pair insulation, a tight lay copper strand ensured that the conductor wouldn't unravel when the insulation was stripped. The overall foil shield was added to suppress RFI and electromagnetic interference (EMI), while a 16-gauge drain wire was included for tying to a central ground system. The Gepco Multi-Pair Shielded Cable, which eventually became the GA618 series, was born! Every aspect of the Gepco cable design was done to save time and make wiring easier



HOW GEPCO BEGAN

and trouble-free (no crosstalk, RFI or EMI problems), which therefore, also saved money.

SHARING THE SOLUTION

In early 1980, Gary contacted a wire manufacturer, explained his design to them, worked out all the details and started producing the multi-pair cable for use at Streeterville Studios where Gary returned to work as Chief Engineer. After a short time, he began showing his products to other studio installers and engineers at radio and television stations, who instantly realized the merits of his designs and started ordering cable from him. Not only was he selling the cable locally, but it caught on quickly in Nashville, TN; Minneapolis, MN; Indianapolis, IN; and Los Angeles, CA.

EXPANSION

Networks, wanting an alternative to the standard analog coax available, started requesting a Gepco solution. This prompted Gary to start working on coax designs with another wire and cable company. When Gary's garage was full of cable, he resorted to having it stored in the basement at Streeterville Studios.

In January of 1984, after three years of working long hours split between his day job in the recording business and Gepco, the hard work paid off and Gary

went into full-time business with an office in downtown Chicago. His first year in business, he designed, built and handled the installation for four recording studios.

The following year when Gary started showing his cables to the major networks in New York City, he landed a huge opportunity with NBC's remote sports division. He redesigned the NBC standard nine-pair shielded remote cable by making it with 12 shielded pairs and a bullet-proof jacket. The new jacket changed the life expectancy of the cable from less than one year to five years. To date, there are still thousands of feet of this cable in use at stadiums all over the U.S., and it is still in field use with NEP Supershooters.

In 1988, Gepco was contracted to install a new broadcast system in Chicago's Wrigley Field, and the next year Gepco won the contract to supply all of the wire and cable products for the new Comiskey Stadium (now U.S. Cellular Field) project also in Chicago.

Between 1988 and 1991, Gepco won the yearly contracts as the sole supplier of broadcast



Open for business in January 1984.



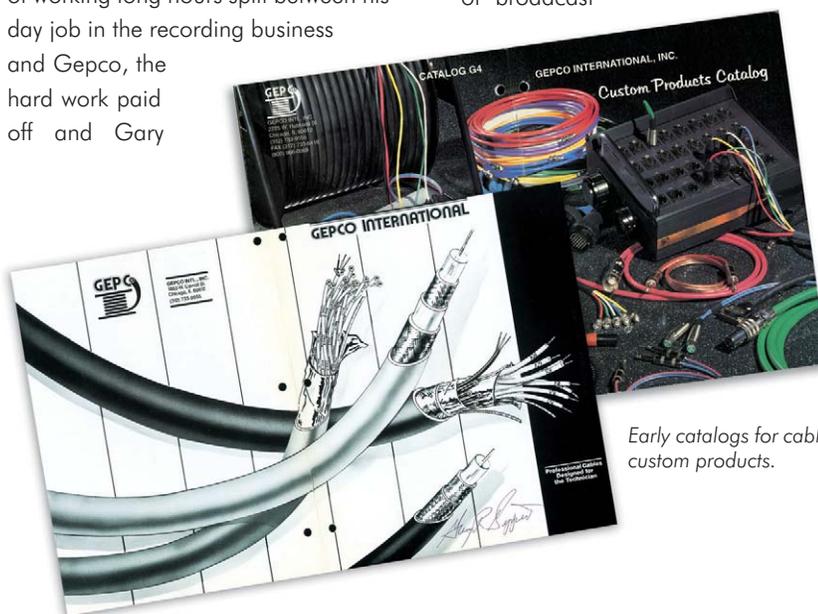
Gepco has had four homes since Gary's garage: the Grand Avenue (1984), Carroll Street (1987) and Hubbard Street (1993) locations in Chicago, IL, and its current location in Des Plaines, IL (1998). Above: The Gepco team breaks ground for the Hubbard Street location.

wire and cable products to NBC and CBS. For NBC, this included cable for all of their golf matches, the Super Bowl, the NBA play-offs, the Summer Olympics, the World Series and the Democratic and Republican National Conventions.

MANUFACTURING & INNOVATION

In 1991, Gary bought the assets of a bankrupt wire company and started to manufacture Gepco products. Since then, Gepco has continually refined its manufacturing process with new machinery and technology. In addition to manufacturing a full line of audio, video, network and camera cables, Gepco also went on to create cable assemblies, distribution racks and boxes, panels and accessories.

In August of 2009, Gary passed the reins of Gepco over to General Cable, a global leader in the development, design, manufacture and distribution of wire and cable products for the energy, industrial, specialty and



Early catalogs for cable and custom products.

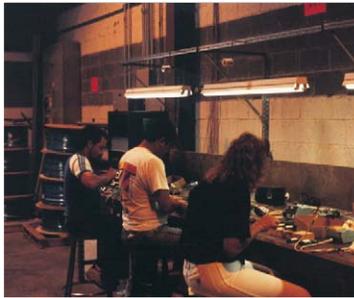
communications markets. While enjoying the benefits of expanded resources, Gepco has kept its agility in responding to the needs of the industry and its customers. Just as Gary remains as VP of Technology, so too does the spirit of innovation.

Gepco was born out of Gary's need to solve a problem in the broadcast industry and has served as a valued and reputable solutions provider to the industry ever since. From the first Gepco Multi-Pair Audio Cable in 1981 to the introduction of the V-Light™ Active Fiber Cable System in 2011, Gepco has a 30-year record of innovation for the Broadcast industry. The continued vision of the Gepco Brand is to be the preferred choice of audio, video and network cabling solutions, providing customers with consistent quality, innovative designs and reliability.



Gepco's first logo.

THEN & NOW



First copper assembly department at the Hubbard Street location in Chicago in early 1990s.



Today's copper assembly department at the Des Plaines location.



Today's warehouse at the Des Plaines location.



Warehouse at the Hubbard Street location in Chicago in early 1990s.

MORE ON GARY GEPPERT

Since the age of five, Gary Geppert was always taking things apart and putting them back together. With a background as a trumpet player and having already decided on a career in engineering, Gary first combined music and engineering during his senior year of high school while working with hi-fi equipment at Allied Electronics.

During his years studying engineering at Southern Illinois University (SIU), Gary worked summers at International Harvester Research Center where he first used electronic equipment to analyze the strength of materials. His time at SIU was cut short when Gary needed to return home due to circumstances with his family. Making the best of the situation, Gary continued his schooling at DeVry University while he worked two jobs: making shell cases for Shure microphones at Midwest Screw Products

and repairing stereo equipment at MusiCraft. He eventually returned to work for International Harvester, who paid for him to finish his schooling at the Illinois Institute of Technology (IIT).

Upon finishing his degree, Gary was unable to find engineering work and instead was doing stained glass and wrought iron work. One weekend while helping install a wrought iron door across the street from Paragon Studios, Gary had a chance meeting with an acquaintance who was apprenticing at the studio. Gary was invited up to see the installation of a new recording console and to meet the owner. After a few months of pursuing a job with Paragon, he was hired as an apprentice in 1969. Gary apprenticed for a year and a half before he began running recording sessions.

Gary was an active recording engineer

for 15 years working for either Paragon Studios (1969-1974 and 1977-1979) or Streeterville Studios (1975-1977 and 1980-1984) until he started running Gepco International full-time. During his tenure at the two major studios in Chicago, Gary worked with recording artists such as Styx, Peter Gabriel, Manfred Mann, T-Rex, Ohio Players, Third World Reggae Band, Uriah Heep, Willie Dixon, REO Speedwagon, the Beach Boys, Jerry Butler and Todd Rundgren. He also recorded four nights at the London House for BASF Records with Oscar Peterson. Oscar was accompanied by Neils Pedersen on bass and Joe Pass, of Johnny Carson's NBC Orchestra, on guitar. The record won a Grammy for "Best Live Performance by a Jazz Trio Group." During that time he also recorded thousands of commercials for major brands.

GEPSCO INTERNATIONAL'S 30 YEARS OF INNOVATION

When hitting on something special, it only makes sense that others will follow. The competition eventually copied Gary's Multi-Pair Audio Cable design, however, never with the same fine detail that made the Gepco solution better. The innovation didn't stop with the first Gepco products. Here's a time line showing some introductions of key products in the Gepco line.

1981 The first Gepco audio multi-pair cable (now the GA618 Series), 22 AWG with individually shielded and jacketed pairs and alphanumeric surface print for easy identification



GA618 Series

1983 75 Ohm video precision coaxial cables

1984 Triaxial cables with all-weather jackets, 59/U and 11/U types

1985 GA803 Series, 26 AWG multi-pair audio cables

1986 New foaming process to create low-loss miniature video precision coaxial cable, the original VPM2000



VPM2000

1987 Full line of audio and video cables • National Electrical Code compliant • Low-loss RG 6/U precision coaxial cable, the original VSD2001 • Flexible RGB and S/C cables • Flexible SVHS cable • Flexible component video cable

1988 GA724 Series, 24 AWG multi-pair audio cables • 32-channel breakout boxes built of tough extruded aircraft aluminum

1989 DT12 37-contact circular audio connector, solder or crimp contacts, field repairable, compatible with other manufacturers, but much improved in design



DT12 Connector

1990 Dual stereo balanced audio cable with parallel extruded jacket

1991 Custom assembly division specializing in products synergistic to the audio and video industry established • Large double-wide, up to 64-channel breakout box, extruded aircraft aluminum • Extra-flexible RG 59/U triaxial cable



Custom Assemblies

1992 110 Ohm digital audio cable, AES/EBU compatible

1993 Low-noise guitar/instrument cable • Custom rack-mountable chassis • Flexible version of digital audio, 110 Ohm AES/EBU compatible • Digital audio cable 8-pair and 12-pair under one jacket, 110 Ohm AES/EBU compatible

1994 10-channel video snake with different colored coaxials • Custom panels • Dual-channel 24 AWG audio cable



Triax Tester

1995 VHD7000 low-loss, extended-distance RG 7/U video serial digital cable • VA1/3, composite cables with one video and three audio

1998 Triax tester

1998 SMPTE hybrid fiber cable development

2000 Fiber lab for SMPTE cable assemblies

2002 VS102000 miniature video coax snake • First introduction of X-Band extended-bandwidth, ultra-flexible audio cable



Fiber Assemblies

2003 Direct burial versions multi-pair audio, triax and coax • Heavy-duty 12 mm hybrid fiber cable and assemblies

2004 First hybrid fiber distribution systems • Ultra-flexible HD coax • Heavy-duty tactical Cat 5e

2005 Ultra-miniature HD coax

2006 Improved DT12 design based on industry feedback • Hybrid component video cables



V-CON System

2007 Expanded fiber optic production capabilities • Four-channel tactical Cat 5e • HD coax swept test to 4.5 GHz

2008 V-CON multi-channel video connector system

2009 Ultra-flexible RG 6/U coax • Modular hybrid fiber distribution racks

2010 Modular hybrid fiber & triax panel system • Heavy-duty 9.2 mm hybrid fiber

2011 13 AWG extended-distance HD coax • Low-smoke zero-halogen cables for European market • V-Light™ active fiber cable system • RunONE™ powered speaker cables



V-Light System