



## THE MARKET

Americans love to be entertained, and they look to consumer electronics as the primary source of that entertainment. For more than 80 years, Zenith Electronics Corporation has established a proud heritage of leadership in consumer electronics products to provide an entertainment experience that surpasses all others. As digital technologies such as HDTV, DVD, and flat-panel displays gain momentum in the United States and around the world, Zenith is committed to helping consumers “Digitize the Experience” by making digital television more affordable and widely accessible.

## ACHIEVEMENTS

A pioneer in electronics technology, Zenith has invented countless industry-leading developments, including the first wireless TV remote controls, the first portable and push-button radios, and the first high-definition television (HDTV) system using digital technology. In fact, Zenith developed the digital transmission system adopted by the Federal Communications Commission (FCC) for HDTV broadcasts. Today, together with its new parent company, global consumer electronics giant LG Electronics, Zenith is paving the way for the digital TV age.

## HISTORY

Zenith’s story began in 1918 when two wireless-radio enthusiasts set up a “factory” on a kitchen table in Chicago and began making radio equipment for other amateurs. Over the next decade, the infant radio industry began to grow as did the business, which sold radios under the name “Z-Nith.” In 1923, Zenith Radio Corporation was born.



The young company’s early accomplishments included the world’s first portable radios, the first home radio receivers to operate on household current, and in 1927 the first automatic push-button radio tuning (when Zenith’s famous slogan, “The Quality Goes In Before The Name Goes On,” was first used). Zenith also pioneered developments in shortwave and multiband radios such as the famous Trans-Oceanic, first introduced in 1942. Zenith was on the leading edge of AM and FM radio broadcasting — including the invention of the stereo FM radio broadcast system used worldwide — and played a key role in developing broadcast standards for black-and-white and color television.

**Television Pioneer.** Early television developments included some of the first prototype television receivers in the 1930s and experimental TV broadcasts, which began in 1939 and, at the request of the FCC, continued during World War II. Zenith launched the world’s first subscription television system in 1947 and introduced black-and-white TV sets in 1948, followed by a series

of innovations throughout the 1950s, including the industry’s first wireless remote controls and 21-inch, three-gun rectangular color picture tubes.

Zenith introduced its first color TV sets for consumers in 1961 and quickly established itself as the leading brand. The 1969 introduction of the revolutionary “Chromacolor” black-matrix negative guardband picture tube doubled the image brightness of color television and established a new standard of performance for the entire industry. The “EFL” (extended field length) electron gun in 1976 and “System 3” modular TV chassis in 1978 also contributed to Zenith’s continued strength in color television during the 1970s.

**From “Zenith Radio” to “Zenith Electronics.”** Mounting competitive pressures in its core consumer electronics business led Zenith to use its broad engineering and marketing expertise to diversify in the late 1970s when the company entered the components and cable television products businesses.

In 1979, for example, Zenith acquired the Heath Company, the world’s largest manufacturer of build-it-yourself electronics kit products for hobbyists. Capitalizing on Heath’s entry into personal computers, Zenith formed Zenith Data Systems (ZDS) in 1980. Zenith’s

management built the computer business into a billion-dollar operation by the late 1980s and sold the Heath and ZDS businesses in 1989.

By the mid-1980s, Zenith Cable Products (later known as Zenith Network Systems) was a leading supplier of set-top boxes to the cable industry and a pioneer in cable modem technologies. The 1990s saw this business evolve into a supplier of digital set-top boxes for wired and wireless networks. Zenith sold its Network Systems division in 2000.

The company changed its name from Zenith Radio Corporation to Zenith Electronics Corporation in 1984, while remaining committed to audio engineering related to television. Zenith engineers co-developed the multichannel television sound (MTS) transmission system adopted by the industry for stereo TV broadcasts in 1984, and the company received an Emmy for pioneering work on development of MTS stereo TV in 1986.

A major Zenith advance of the 1980s was the patented “flat tension mask” technology for high-resolution color video displays with perfectly flat screens, glare-free viewing, and superior





performance, which earned the company a technical Emmy in 2001. Other noteworthy Zenith television innovations include TV receivers with “Sound by Bose” in 1986 and “Dolby Surround Sound” in 1988, as well as the first TVs featuring built-in closed caption decoders (1991), electronic program guides (1994), and track-ball-operated remote controls (1995).

#### THE PRODUCT

Zenith has been a leader in HDTV, or high-definition television, for 15 years, setting the stage for the broadcast revolution currently under way. As one of HDTV’s earliest proponents, Zenith developed a number of key digital technologies, most notably the VSB (Vestigial Side Band) digital transmission system that the FCC adopted in 1996 as the centerpiece of the U.S. digital television broadcast standard. In 1997, Zenith earned a technical Emmy for pioneering developments behind the digital standard.

Today, as the transition to digital TV broadcasting continues to gain momentum — with local TV stations using Zenith’s patented VSB technology to transmit HDTV programming to more than 90 percent of U.S. households — Zenith

offers for the home and professional markets one of the industry’s broadest arrays of digital television technologies. They include direct-view and rear-projection HDTVs, plasma display panels and liquid crystal displays; digital set-top boxes; DVD, MP3, and CD players; and VCRs and other products designed to digitize and enhance the viewing experience for American consumers.

#### RECENT DEVELOPMENTS

By the mid-1990s, Zenith was seeking a global partner with complementary strengths that could help lay the groundwork for leadership in the digital age. The company found that strong partner in LG Electronics Inc. (LGE), which acquired a majority interest in Zenith in 1995. In 1999, after completing a broad financial and operational restructuring, Zenith became a wholly owned, independent subsidiary of LGE.

Ushering in the new millennium, Zenith began to reposition its famous brand by building on its distribution and technology strengths and the vast resources of its new parent company. The transformation into the digital leader accelerated in 2001 as Zenith dramatically reduced its analog product offerings and introduced a comprehensive family of digital television products. By 2002, Zenith had established the industry’s most aggressive approach to digital television, with a product line comprising more than 80 percent digital products — reflecting the powerful combination of Zenith’s long time leadership in HDTV and LGE’s display technology strengths.

#### PROMOTION

Calling on consumers to “Digitize the Experience<sup>®</sup>,” Zenith’s broad-based branding campaign is introducing Zenith to a new generation of consumers. Armed with its broad digital product lines, an updated version of its famous lightning-bolt logo, and an aggressive new marketing campaign, Zenith is targeting a younger, more affluent target audience.



High-profile partnerships such as the Sundance Film Festival and the New Museum of Contemporary Art also reflect the company’s focus on bringing digital technology to technology-savvy consumers. Building on the success of its 2001–2002 marketing program (Zenith’s first major national advertising campaign in 15 years), Zenith is further expanding its advertising presence in 2003 to reclaim its birthright in HDTV.

#### BRAND VALUES

Beginning with the advent of radio, the Zenith name has been synonymous with quality and innovation. The company’s lightning-bolt logo is one of the most recognizable trademarks in the country, evoking feelings of trust, security, and familiarity in generations of Americans. With

these core values as a foundation, and backed by the technological resources and marketing muscle of its parent company, Zenith has repositioned its famous brand as the digital leader.

#### THINGS YOU DIDN’T KNOW ABOUT ZENITH

- Zenith invented and introduced TV remote controls: “Lazy Bones,” the first wired TV remote in 1950; “Flash-Matic,” the first wireless TV remote in 1955; and “Space Command,” the first practical wireless remote control (1956), based on ultrasonic technology used throughout the industry for the next quarter century before being replaced in the early 1980s by infrared remotes.
- Zenith invented the first baby monitor. “The Radio Nurse,” introduced in 1937, which allowed parents to hear sounds from their children’s rooms.
- Other little-known developments from Zenith’s laboratories over the years included innovations in hearing aids (the only Zenith consumer products built during World War II when production was devoted to communications devices for the war effort), as well as night-vision, laser discs, and subscription TV, to name a few.
- Zenith pioneered the technology behind today’s perfectly flat picture tubes for high-definition and conventional television—earning 137 U.S. patents for core research in flat CRTs for television and computer displays.
- Zenith has more inductees in the Consumer Electronics Hall of Fame than any other company.
- Zenith is a major supplier of televisions to hotels, hospitals, schools, military installations, and correctional institutions.