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Black Box Corporation.

BLACK BOX[®]

NETWORK SERVICES

Solution profiles

exclusively by Black Box



National Electronics Retail Chain

Ringin up success with Black Box.

Industry: Retail

Project: New facility installation and maintenance

Major Challenge: Nationwide service

A national electronics retail chain selected Black Box to provide complete network services. The services include complete infrastructure services for new facility installations, as well as ongoing design, maintenance, and project

management services for existing sites on a national basis. The chain chose Black Box because we could provide consistent, reliable service, quality, and guarantees coast to coast. Black Box stood up to the challenge. Take a look at the details **below** and on the **next page**.

Complete solutions from one source—that's Black Box Network Services.

The details:

Our service to this customer is divided into three main areas: new retail installations, district office and distribution center wiring, and ongoing design, maintenance, and project management support.

For consistency, Black Box designed the same basic infrastructure plan for each new retail site. The stores are all wired with 200 horizontal Category 6 cables to support voice and data applications. In addition, 80 coax horizontal and backbone cables per store support CATV and video applications, as well as paging and speaker systems. Black Box also provided all the demarcation and T1 equipment and extensions for each site, as well the interconnecting cabling and equipment within the communications room.

Design and services for district offices and distribution centers vary depending on the site.

Black Box Network Services also provides ongoing design suggestions to the company. In addition, we created a project management process, including a thorough reporting process, specifically for this customer to provide consistency, quality, and on-time delivery of all network services.

The components:

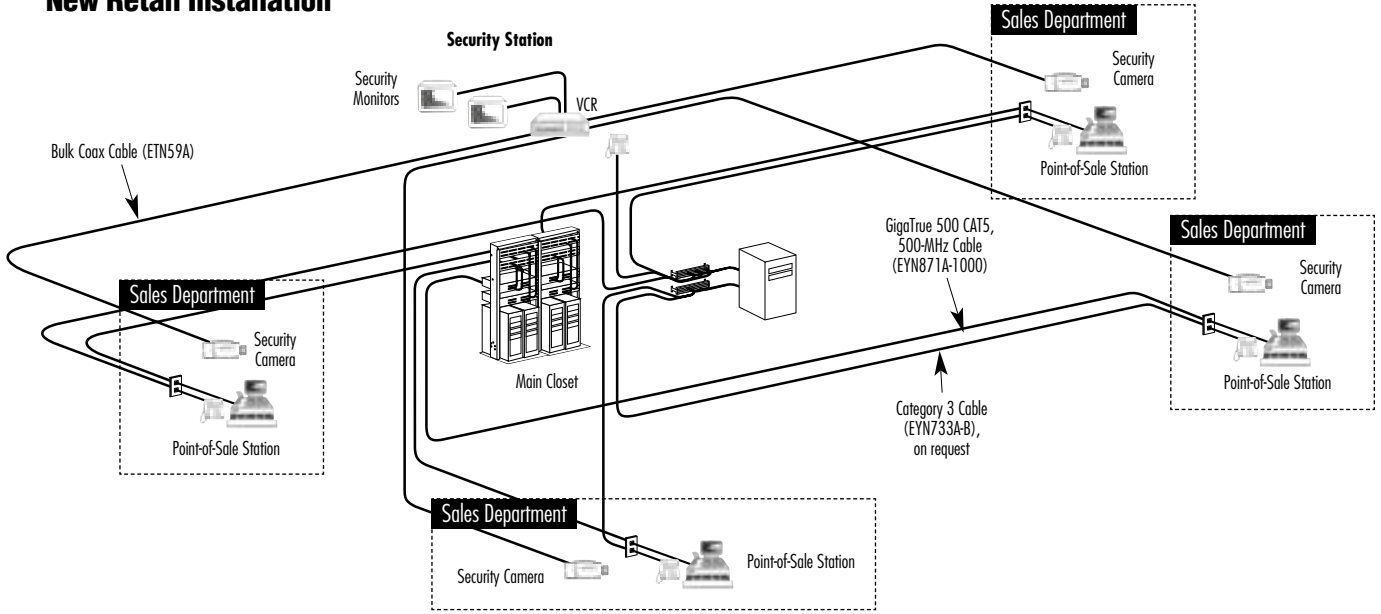
- (65) stores serviced to date
- District offices installed
- Distribution sites installed
- (200) horizontal Category 6 station cables per store
- (80) coax cables per store
- Demarcation and T1 extensions
- Communication room interconnect cabling
- Distribution racks
- Patch panels
- Patch cords



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New Retail Installation



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Bank Headquarters

Banking on Black Box pays off!

Industry: Finance

Project: New facility voice/data/video installation

Major Challenge: 78-day completion schedule

Black Box provided a complete, one-source solution for a new five-story bank headquarters. This facility houses 600 workstations. The solution included design, products, and installation. The main challenge was the extremely tight time frame. The entire job—from design to installation—

needed to be completed in a mere 78 days. Black Box met the challenge. Take a look at the details **below**.

Complete solutions from one source—that's Black Box Network Services.

The details:

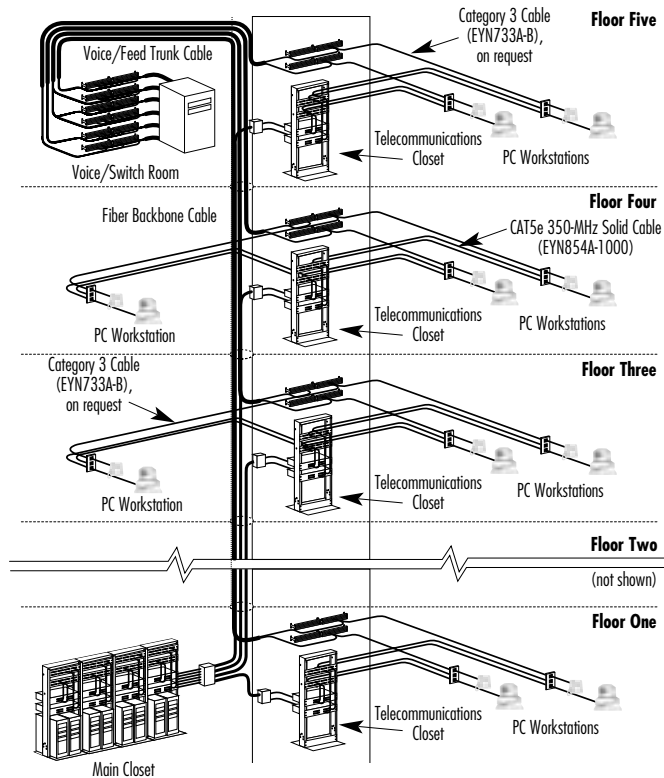
To connect the 600 workstations, the network plan consisted of one Category 3 cable for voice communications and two Category 5e data cables for each workstation.

Because of the five-story design and the critical need for cost efficiency, the building was designed with the voice-switch room on the fifth floor. This reduced the expense of running costly voice/feed trunk cables to each floor.

A telecommunications closet on the first floor supports floor one. One telecommunications closet each is on floors three, four, and five. The fifth floor also houses the voice switch room for voice communications.

The network was designed in a star configuration with a 12-stranded multimode fiber data backbone cable supporting primary data to the telecommunications closets. A Category 5e 4-pair backbone cable provides backup data support to all the telecommunications closets from each workstation. 300 pairs of Category 3 voice/feed trunk cable running to each telecommunications closet support voice communications. All copper cables are terminated with RJ-45 jacks. The fiber cable is terminated with SC connectors.

New Bank Headquarters Voice/Data/Video Installation with Critical Redundancy



The components:

- (4) telecommunications closets
- (1) voice switch room
- (1) computer room
- (600) workstations
- (2000) horizontal station cables
- (2300) pairs of voice/feeder backbone
- (8) 12-strand trunks of fiber optic cable
- (8) 300-pair 110 blocks
- (16) 48-port patch panels
- (12) racks
- (600) patch cords



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Operations Center Installation

Black Box has the perfect remedy.

Industry: Health care

Project: Network installation for new facility

Major Challenge: 5-week time frame

Black Box provided a complete, one-source solution for the new one-floor operations center of a health care company. This facility houses 400 workstations—a big job. The solution included design, products, and installation. The primary challenge was the extremely tight time frame.

The entire job—from design to installation—needed to be completed in five short weeks. Black Box was ready for the challenge. Take a look at the details below.

Complete solutions from one source—that's Black Box Network Services.

The details:

To connect the 400 workstations, the network plan consisted of one Category 3 cable for voice communications and two Category 5 data cables for each workstation. All Category 5 cables were terminated on 24-port patch panels mounted in racks.

To accommodate the large number of workstations, the building was designed with three telecommunications closets, one in each wing, as well as a main telecommunications closet.

The voice backbone consisted of 300 to 600 pairs of voice/feeder trunk cable running to each telecommunications closet. The voice cables were then terminated on 110 blocks in the closets.

For the data backbone, Black Box ran 24 strands of multimode fiber cable in a star configuration from the main closet to each telecommunications closet. Additionally, 12 strands of multimode fiber cable were installed in a ring configuration around the main closet to connect the four telecommunications closets. All fiber cable was terminated with ST® connectors. Black Box also equipped all telecommunications closets with the necessary relay racks and cable management.

Black Box worked with the customer to design the network, provided all the necessary premise hardware, and called on our extensive installation resources to finish the job in five weeks.

The components:

- (400) workstations
- (1200) horizontal station cables
- Fiber backbone cable
- (2100) pairs of voice feeder-backbone
- (1) main telecommunications closet (computer room)
- (3) telecommunications closets
- (96) strands of multimode fiber optic cable
- (7) 300-pair 110 blocks
- (20) 24-port patch panels
- (14) relay racks
- Patch cords

New Health-Care Facility Voice and Data-Network Installation

