

Retail Store

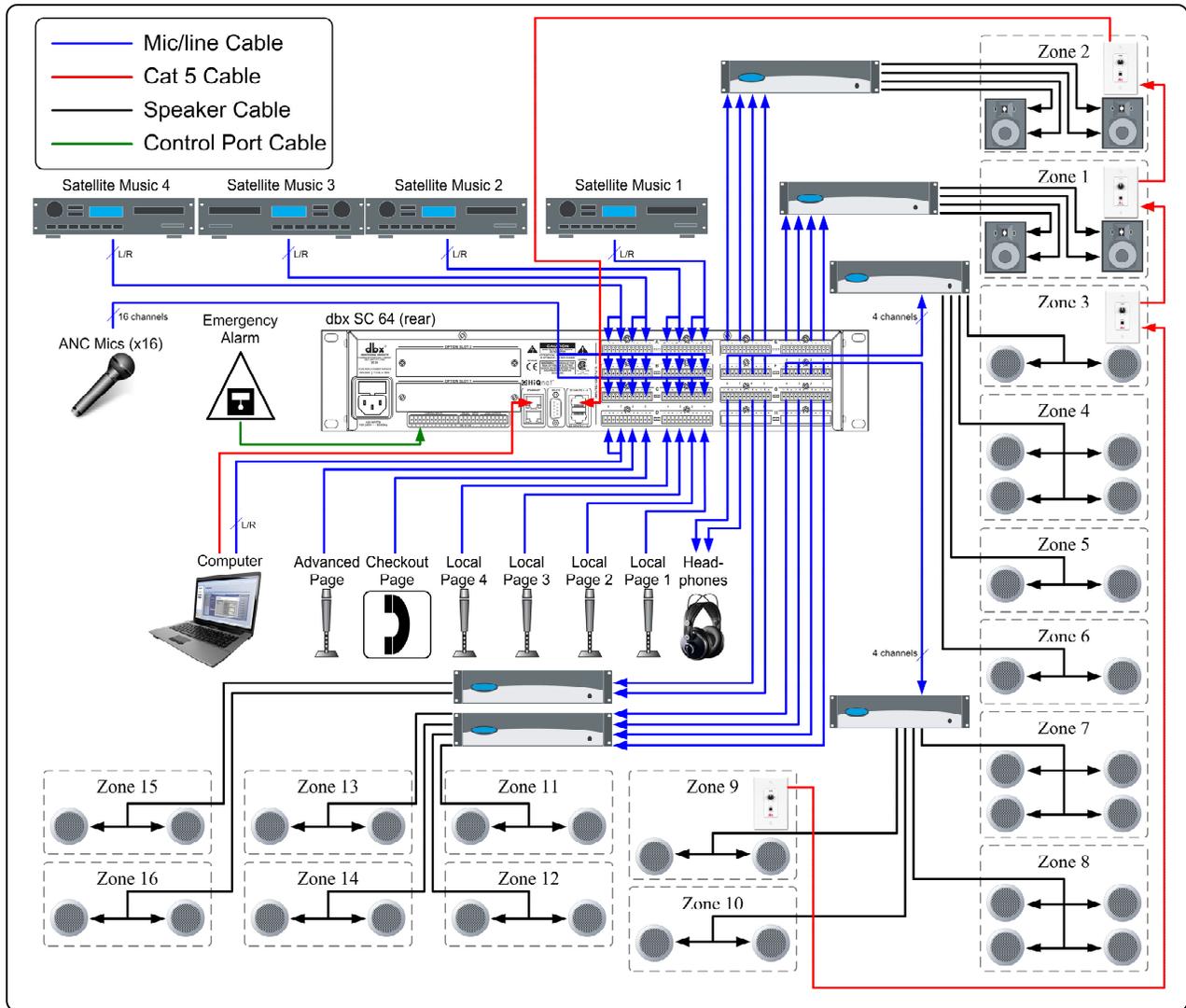
SC 32 / SC 64

Today's large retail store may have departments ranging from clothing and grocery to appliances and electronics. These large stores have a number of unique needs, including:

- The ability to mono-sum and route multiple sources to different zones (departments), depending on each zone's intended purpose
- Multiple paging stations for store-wide announcements, as well as one paging station with zone-specific paging capability
- Music that is never too quiet or too loud
- Audible advertising tailored to specific departments
- Minimal daily interaction with the system



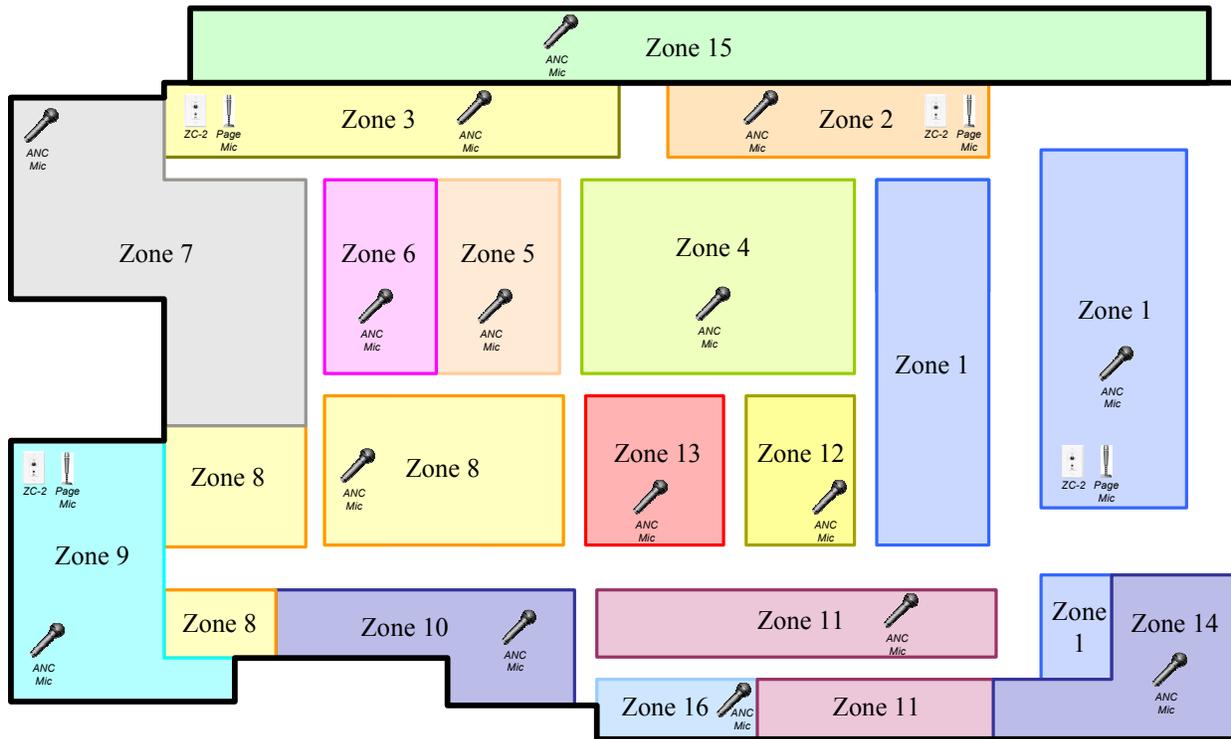
To meet these requirements, a single SC 64 device with a 32 x 24 input/output configuration (4 input cards and 3 output cards) is used. In this application, the system will be almost entirely automated, requiring minimal daily interaction with the system after the initial configuration.



Appropriate background music is routed to the 16 various zones during the initial configuration using the Processing Wizard in HiQnet System Architect™. In order to avoid sudden jumps in sound level when switching between audio sources, Automatic Gain Control (AGC) is added as an Input Insert to all non-mic channels.

All paging mics (except the checkout page mic) use Automatic Feedback Suppression (AFS™) and Compression Input Inserts to enhance the clarity of paging announcements. The checkout page mic is of the phone variety typically seen in the checkout aisles of retail stores, and it can cause the user's voice to sound thin and unclear due to the bandwidth limitations inherent in telephone systems. The Sub-Harmonic Synth Input Insert addresses this problem by extending the low frequency response, adding low end and realism to the user's voice. This differs from EQ in that new frequencies are being generated, whereas EQ only boosts (or attenuates) existing frequencies. To further enhance the intelligibility and richness of all music and announcements, each zone's speakers are tailored specifically to the acoustics of their surroundings using Output PEQ.

The building's emergency alarm system connects to one of the eight Control Input Ports on the SC 64. After quickly completing the GPIO Wizard, the SC 64 is configured to mute all output zones when the emergency alarm system enters an open state.



Basic store-wide paging is available from four locations throughout the building. Each location contains a mic and a ZC-2. When employees release the mute button on the ZC-2, the paging mic goes live, and program material throughout the building is overridden by the page. The amount by which the paging mic overrides other sources is set within the Priority Mix Controls window during the initial system configuration.

Ambient Noise Compensation (ANC) is utilized to control the system's volume throughout the store. A dedicated ANC mic is inconspicuously installed somewhere within each of the 16 zones. Using ANC, the SC 64 automatically adjusts each zone's volume according to the level of noise (typically generated by customers) in the zone. This conveniently ensures that audio content is always heard at the same perceived level—regardless of the noise level within the zone. This also eliminates the requirement to adjust the system's volume throughout the day, freeing up employees to help customers and perform other vital duties.

Located in the manager's office is a single computer running HiQnet System Architect™. When needed, this computer provides comprehensive control of the audio system's advanced functions. One such function is zone-specific paging. Using a Custom Control Panel based on the store's floor plan, the user visually selects which zones will hear the paging announcement (see "Zone Specific Paging" Custom Control Panel within the accompanying "Retail Store" Venue File). The ability to steer pages to certain zones is a useful feature for locating employees without disrupting the audio in other zones.

The office computer also contains prerecorded promotional announcements that are tailored to specific zones. Using the Scheduler function within HiQnet System Architect™, these audio files are automatically played and routed from the computer to individual zones at predetermined times throughout the day. In addition to promotional announcements, the Scheduler function also triggers daily store-opening and store-closing announcements every day at 8:00 AM and 6:00 PM respectively.