

## IED SOUNDS GRAND IN RENOVATED GRAND CENTRAL TERMINAL

It is undoubtedly one of the most famous structures in the country, if not the world. Grand Central Terminal in New York City is the main hub for the Metropolitan Transit Authority's Metro-North Line. Each day hundreds of thousands of commuters pass through its historic main concourse either on their way to or out of Manhattan. These people who need to hear and understand any important announcements or messages that will help them get to where they need to go.

One audio distribution management company has experience with transit facilities around the world, so it's not surprising that Grand Central Terminal uses the 500ACS Announcement Control System<sup>®</sup> from Innovative Electronic Designs, Inc.

### THE FACILITY

Originally opened in 1913, Grand Central Terminal is just as much a part of the American consciousness as it is a part of transportation history. While it now serves only as a commuter rail station, it was once the railroad gateway to the rest of the nation. The concourse's 125-foot-high, barrel-vaulted ceilings and arched windows are recognized for both their artistry and functionality.

Over the last five years, however, Grand Central has undergone a substantial renovation that included restoration of the large ceiling, an improvement in public areas, and an expansion of retail and restaurant space. Part of that renovation included an upgrade of the public address system. The principal design focus was to improve the intelligibility of train boarding and arrival announcements.



### THE SYSTEM

The passengers who move through Grand Central Terminal now benefit from IED's 500ACS Announcement Control System. Designed to improve communication quality and efficiency, the 500ACS includes digital signal processing, powerful control software, microphone stations, and high quality sound. Already at work as part of the audio processing system in the New York Subway and in many major airports all over the world, the 500ACS is the system of choice for any transit facility that wants to get important announcements, pages, and messages to its customers.

The team responsible for making this possible was Hansen Associates of New York, NY (consultant) and Norcon Communications of Long Island, NY (contractor).

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The 500ACS at Grand Central Terminal consists of:

- IED's 508 Series microphone stations in Station Announcer's Office and Train Announcer's Booth, with a special option for eight presets
- 16 microphone station inputs by inputs by 72 zone outputs
- 256 channels of diagnostics
- 72 channels of one-third octave equalization in eight rack units
- 64 point interface to the fire alarm system
- Ethernet LAN including two computer station locations
- Automatic assembly of train announcements
- 64 channels of IED's 540 Ambient Analysis System
- 118 channels of 200W amplification provided by IED's 6000 Series Power Amplifiers

All announcements processed by IED's 500ACS are broadcast through differing speaker types throughout the facility according to the architecture of the areas served. The areas include the train platform boarding areas, many interconnecting hallway zones, and the large great concourse zones. To help with speech intelligibility in the highly reverberant great concourse, Duran Audio's Intellivox speakers were used. The result? Unmistakably clear communication between the Grand Central Terminal train announcer and the commuters.

## **IED'S 500ACS AT GRAND CENTRAL TERMINAL:**

- Efficient distribution of announcements, messages, and pages
- Ambient Analysis to raise level of announcements in real time in areas that become noisy
- Fire alarm interface
- Sound powered by IED's 6000 Series Power Amplifiers
- A substantial improvement in audio quality to coincide with all the terminal's renovations
- Quality sound from the leader in audio systems management