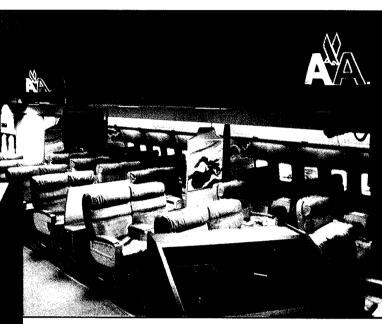
Sound Connunce of the second s

# AIRLINE TRAINING CENTER

American Airlines trains its personnel via mock ups of planes and airport areas. Cameras in the galley, mics in the ticket

counters and remote operation of the audiovisual systems were all carefully installed. 38





## Racks, Part Three

The enclosure is the most apparent **aspect** of your installation. A comprehensive primer on rack enclosures, including ratings, construction materials, ergonomics, and tools for designing your racks. 44

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# CONFERENCE CENTER LINK

When GRP Records consolidated its operations, the existing recording studio was linked to a new conference center and to the individual executives' offices. And the sound had to be consistent with the executives' home listening room. 31

# MULTI-PURPOSE HALL

Despite near-perfect acoustics, a sound system was needed to enhance the flexibility of Boston Symphony Hall -for financial and for artistic reasons. Andrews Audio and Evening Audio installed a system that would foster better quality for TV and for guest artists without ruining the Orchestra performances. 22



# Networking the Conference Center

## GRP Records Can Access From Any Office

## **BY JEFF ADER**

**G** RP records recently celebrated its 10th anniversary as a record company and consolidated its operation into one building in New York City.

The company's recording studio, called "The Review Room," was an early installation (on the 12th floor) instituted well before the consolidation phase. The task faced by the contractor was to integrate the existing recording studio into a network that would link it to the new "media/conference center" and to the top executives' offices on the 10th floor. These key people in the company would then be able to access any of these rooms and utilize or monitor them.

Finally, there had to be a consistency of sound between the "media room," the "review room" and the private listening room in Larry Rosen's home. (Mr. Rosen is the "R" in GRP records. His partner is Dave Grusin. Together they have played on, engineered and/or produced countless albums and productions for the top jazz artists of the world.)

When the decision to consolidate was made they had to find the right person to handle these diverse but critically important rooms. There was really only one person for them who could do this the right way, the man responsible for "The Review Room" and Larry Rosen's listening room, Harry Hirsch.

Harry Hirsch and his partner Jerome Bunke are the owners of Digital House, the leading CD and cassette production service. Their services include tape preparation, mastering, rep lication and duplication. Digital House is also regarded as the foremost de-

## There had to be a consistency of sound between the "media room," the "review room" and the private listening room.

signer and printer of customized packages for the specific needs of CD and cassette releases. Their motto is "for those who hear the difference."

But this is only one area in which Harry shines. He is also a musician, an award winning audio engineer, recording studio owner, audio consultant and studio designer, a founding member of SPARS, the founder of the Center for the Media Arts School of Audio Arts and a member of the New York chap ter of NARAS. He has been on the Grammy Nominating Committee for Engineering for the past 10 years.

He maintains numerous contacts with the top people in the business. This enables him to put together the best team of people for such an important job as this.

#### THE TEAM

Harry has a real knack for finding the right people in a given situation. This proved to be the case for this project, too. He enlisted the talents of Greg Hanks for selection and installation of the computer network that interfaces the studio, conference room and executive offices.

Greg Hanks is the founder and president of New York Technical Sup port, Ltd. He specializes in the design, installation and repair of audio equip ment and in this case: Computer Aided Services, Ergonomic Optimization; Mechanical, Enclosure and Panel design; Installation and wiring design; Autocad operation.

He was previously the Chief Engineer at Wally Heider Recording Studios in Hollywood, Calif. and Technical Director at Audiotechniques Inc. in New York. He founded New York Technical Support, Ltd. in 1982.

Harry told Greg that he needed custom built remote controlled equipment that could be run from the conference table. The system that Greg proposed was a Crestron touch-controlled panel

JeffAder is a writer and consultant in the sound and communications industry.



composed of a Crestron Crestnet 2 Multipurpose Controller; an Autonet Audio-Video/Data Crosspoint Matrix; and a PC.

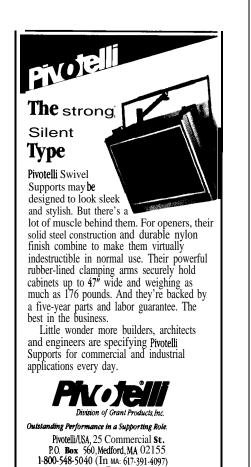
The Crestnet runs the Crosspoint controller, and the PC runs the Crest-

Greg designed the conference room to be a "server hub" with the work stations being the executives' offices.

net through a serial interface.

The system has a threefold function:

• Boardroom presentations and international video teleconferencing.

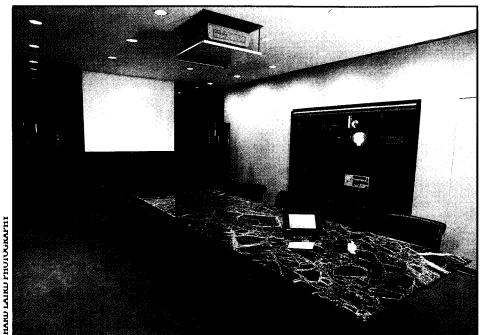


• A universal copy center (any format from any format).

• Accessibility from any executive's office via remote.

Greg designed the conference room to be a 'server hub" with the work stations being the executives' offices. By utilizing the Crestron in this manner, it became destination oriented. There are also tie lines to the recording studio — "The Review Room." Originally a relay system was proposed but the AMX/Crestron proved to be vastly superior. Within these pages, you can see a photo of the Conference Room, and a list of equipment provided by Mark Wexler, Senior Vice President of Marketing and Promotion at GRP.

The next person Harry enlisted for the "team" was Victor Schwartz, architect. Construction of the "Media/Conference Room" had some very specific problems to address including tie lines to four executive offices and the "Review Room" (recording studio). The first thing was its location in the center of the floor with offices all around it. This was solved in a large part by putting corridors and the reception area in the adjacent spaces. The next factor to consider was the sound isolation of the room itself, especially in relation to the floors above and below where other tenants have occupancy and would be concerned with unacceptable levels of sound.





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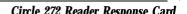
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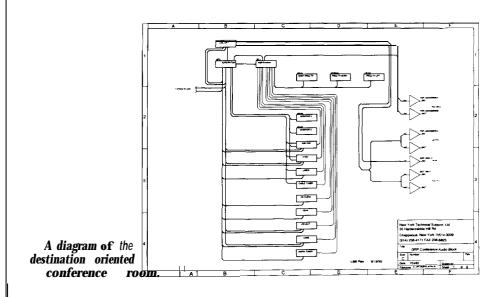
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The solution to this problem was using a combination of sheetrock (three layers), plywood (two layers) and sheets of fiberglass pucks to a thickness of five inches, to build up the floor.

This made for a very resilient floor, and venting it properly was of paramount importance. It had to "breathe" properly and flex. The finishing of it

## The ceiling height is approximately 9 feet and the wall on one side of the room acts as a diaphragm to absorb sound.

was just as important as its construction and composition.

The ceiling height is approximately 9% feet and the wall on one side of the room acts as a diaphragm to absorb sound.

Victor Schwartz said, "It's great that Larry had the foresight to insist on getting someone to put the room together. He brought Harry in to assemble the specialists. They (GRP) wanted the inter-connectivity to run the equipment a certain way. They got what they wanted. Harry did the research until he found what was needed."

From an ensuing discussion with

Harry Hirsch and Larry Rosen we find the proliferation of High Definition TV and film projects that GRP is becoming involved with and the need for teleconferencing with Matsushita (Japan), which now owns GRP. One such project is a forthcoming Dave Grusin album entitled "A Homage to Duke" that will have a High Definition Video

## "THE REVIEW ROOM" EQUIPMENT LIST

NEVE 8058 MK II Console STUDER A-80 MK II Multi Track (24) STUDER A-80 14" 2 Track OTARI MTR-10 4 Track SONY 1830 Digital Processor PYGMY AD-I Analog to Digital Converter APOGEE Digital to Analog Converter SONY 3000 Digital Editor 2 SONY DMR-4000s SONY PCM 2500 A/B DAT Machine Timeline LYNX Keyboard Control Unit 4 Timeline LYNX Modules SONY VO-9850 Video Recorder LEXICON 480L Digital Effects System LEXICON PCM-70 Digital Effects Processor SONY Digital Reverb DRE-2000A AKG BX10 Spring Reverb YAMAHA REV-7 Digital Reverb **UREI 813A** Monitors ACOUSTIC ENERGY AE-1 Near Field Monitors McINTOSH MC-2500 Amplifier

shoot to complement it.

High standards are an integral part of GRP because of Larry's and Dave's own experience of making records, engineering, producing and playing as musicians. Hearing a production in the best possible environment and translating that quality to wherever it will be heard has always been their goal.

According to Larry Rosen, "The level of excellence that you are trying to achieve is always to that level of professional sound quality. I think that is the frame of reference. Certainly between Dave Grusin and myself, we've both always been able to achieve that in the time we've been working together. The question then becomes, 'How do you project that into other areas of your business?' So when it comes to something like my home where I would get something like

GRP CONFERENCE ROOM EQUIPMENT LIST	
REMOTE CONTROL: DISTRIBUTION MATRIX:	Crestron Crestnet II Auto Patch
ENVIRONMENTAL PROCESSOR: Lexicon CP-1	
EQUALIZER:	Richler Scale Series 3 1/2, Octave EQ Analyzer with
	Subsonic Filter and Electronic Crossover
AMPLIFIERS:	2 Adcom 6FA-535L (1 right speakers)
	(1 center speakers)
	2 Adcom 6FA-555 II
SPEAKERS:	(front speakers)
SPEARERS.	Martin Logan "Quest"- (Front)'
TELEVISION / MONITOR:	B & W CWM8 - (Surround) Sony "Super Bright" Projection
	Mitsubishi CS-35 FX1 NAD 13' Monitor
RECEIVER:	Luxman R117 Digital Synthesized AM / FM Receiver
DAT:	JVC XD 2110
CD:	Nakamichi CD2 Music Bank System
	JVC VS-611 Compact Disc Graphics Decoder
CASSETTE:	Sony TC K890 ES
VHS:	JVC HR-D840U Hi-Fi
34":	Sony VP-7020



**Circle 262 Reader Response Card** 



Rosen's listening room was isolated so that there was no vibration going to any common beam of his house.

DAT's of works in progress or whatever, I want to listen to it in the best possible environment. That's what led to the building of a listening room in my house: the best possible proportions that we could get with the technology that was available at that time. It encompassed all the formats available, in audio and video.

Putting a room together in my house had its own set of problems with my wanting to listen to product at 12 o'clock at night and having kids who are going to high school. This created another listening environment problem - not only the acoustics in the room itself but the isolation factor. We spent a lot of time working on this problem. Harry practically cut off one half of my house from the other. He built airlocks going into the room and completely isolated it so that there was no vibration going to any common beam. It all worked out great. It was really amazing as to the isolation."

"Harry was also involved in building the recording studio for GRP 10 years ago. We called it the "review room" because Dave and I wanted a room that we could playback in; a place where we could do two-track edits after producing an album and spending

RICHARD LAIRD PHOTOGRAPHY

Harry practically cut off one half of my house from the other. He built airlocks going into the room and completely isolated it.

hours mixing it. We found ourselves Dave Grusin, and Harry Hirsch doing lots of sequencing of songs. We all had — in their particular end were constantly running back and — a commitment to excellence.



Larry Rosen's listening room control panel.

forth from studios. Harry with an eye to the future said, "You're going to need a 24 track studio."

They not only expanded and built a 24 track studio. Under Harry's advice they ran tie lines from their executive offices and were able to record from their individual rooms into the studio at any time of day or night. Mike Landy, Chief Engineer and Technical Director of GRP Records, was kind enough to supply a list of equip ment currently used in The Review Room.

From looking at these three rooms we get a glimpse of the evolution and growth of a record company and the underlying ideology that guides it. There is no doubt that Larry Rosen Dave Grusin, and Harry Hirsch have all had — in their particular endeavors a commitment to excellence

oc Cound & Communications