

**SHURE**

VOCAL MASTER

The Shure Vocal Master Sound System was conceived as a portable public-address system especially for professional entertainers who demand the highest standards of sound reproduction wherever they perform.

From this beginning, it has become recognized among leading sound engineers throughout the world as a highly versatile system suitable for virtually any portable or *permanent* sound installation where high quality is desired. Because of this wide-spread acceptance, the Vocal Master Sound Systems may be found today in a broad range of installations including churches, high schools, colleges, auditoriums, hospitals, lounges, country clubs, as well as on stage with stars of the entertainment world.

The basic system, consisting of two speaker columns and an amplifier console, is compact and rugged enough to handle the most intense traveling schedule with efficiency. Yet, its attractive streamlined look fits in comfortably with virtually any interior, making the Vocal Master appropriate for permanent as well as portable use.

These pages offer a representative selection of Vocal Master applications. Regardless of the type of application, however, it is the same versatile Vocal Master Sound System at work in each situation.



THE MODERN HOUSE OF WORSHIP MAKES

First Church of Nazarene Indianapolis, Indiana

Although some churches purchase the Vocal Master for permanent installation in their chapel areas, others buy Shure systems for needs that are uniquely individual.

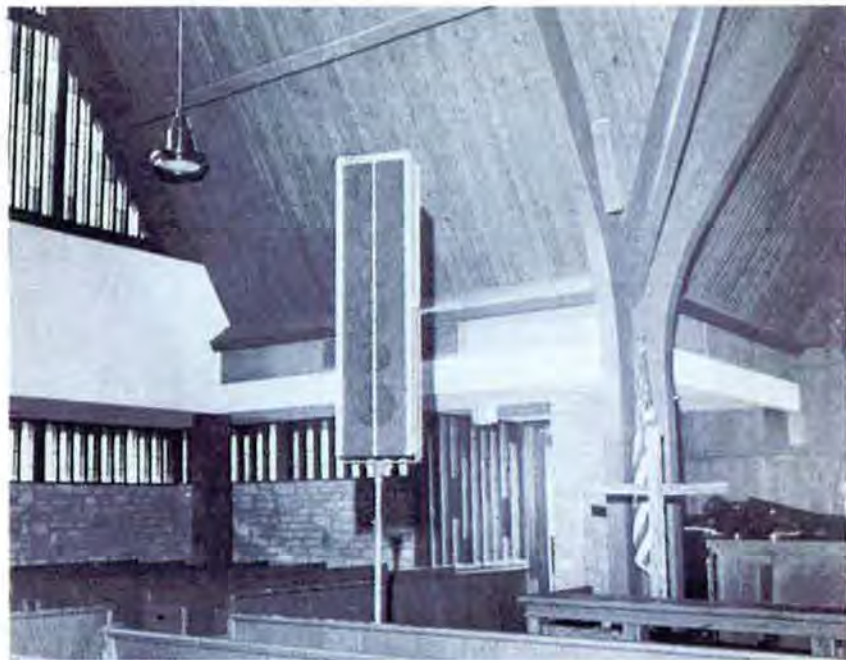
The First Church of the Nazarene is a case in point. It had a good youth choir 38 voices strong that became very good and then excellent, so excellent, in fact, that it was deemed worthy of performing for audiences beyond its own parish. Its name was changed from the Chapel Tones to the Now Generation Singers, and ever since, it has been touring several times a month through Indiana, Illinois, Wisconsin, and Michigan.

"We bought the Vocal Master to use with the Now Generation Singers," says Rev. William Griffin, pastor of the First Church of the Nazarene, "and portability was our main concern after quality. We're real, real happy with it."

On tours, the system is operated by John Arthur, who says, "The thing I really like about it is that no matter where you are in the audience—in front or in back—you get the same volume. After we bought the system, we decided we needed some elevation for the speakers, so we built two mounting tripods for the columns. In this position, we don't have to blast, and consequently we rarely have a feedback problem. If we should, the anti-feedback switches subtly eliminate it."

The system has also been moved into the chapel on occasion for special plays and the Easter Cantata and Christmas program. The chapel is equipped with a built-in installation, but "there's really no comparison between the permanent system and the Vocal Master," according to Arthur. "The old installation was the result of guesswork at the time the building was constructed, and they guessed wrong. It's simply not adequate."

"The Vocal Master is."



When used inside the chapel, Vocal Master speaker columns are mounted on specially designed stands, which permit height adjustments and also easy tilting of the columns upward or downward. The stands are also used when the system is taken on tour by the choir.

Rev. Griffin uses four Shure Unidyne II Model 556S Microphones on the altar. Each is mounted on a floor stand.



AN INVESTMENT IN COMMUNICATION

St. Peter Catholic Church San Pedro, California

San Pedro, California, sits on the southeast tip of a tiny peninsula of territory bulging slightly from the Pacific coastline, just south of Los Angeles. There, Father Martinelli presides over his parish as pastor of St. Peter Catholic Church. Although the church is steeped in the great Spanish traditions of the area, Father Martinelli is not one to reject modern technology.

In talking about the acoustics of the chapel and its sound requirements, he recalls the old system that had been used for many years. "The main problem was that it was just old," he says. "It did not provide enough power to cover the chapel properly."

About a year ago, a church committee was appointed to select a sound system better equipped to serve the acoustical needs of the relatively austere environment of the chapel. The committee, after some investigation, settled on a Shure Vocal Master.

"It is a permanent installation in the chapel, and is used almost exclusively for church services," he says, "meaning sermons, prayer, and guest commentaries of those who take part in the service. Currently, we're using two speaker columns, mounted on the wall facing the congregation. They are not concealed, and are placed one on each side of the altar. We have also connected the Vocal Master Console to some speakers, one floor below in an auditorium. This is useful for meetings, recreational affairs, and things like that . . .

"The chapel system has been working well for us," says Father Martinelli, "and has met our needs."

The Vocal Master console is placed permanently in a small closet just off the altar, discreetly concealed from public view.



Traditional on the outside but modern on the inside characterizes St. Peter Catholic Church, a Spanish-style house of worship nestled in a quiet residential area of San Pedro, California. The Shure Vocal Master Sound System is used in the chapel to assure a clear, well-modulated audio level.

Placement of the Vocal Master speaker columns horizontally on ledges flanking the altar provide complete and perfectly balanced coverage while not interfering with the traditional decor of St. Peter Catholic Church.



EDUCATION FINDS A VERSATILE VOICE IN

Texas Hospital Association Austin, Texas

Among the activities of the Texas Hospital Association is the Texas Health Careers Program, a show-biz approach to motivate young people into seeking careers in the allied health fields—meaning everything from nurses and x-ray technicians to physical therapists and medical secretaries.

"We've been using a Shure Vocal Master Sound System for years in our high school assembly programs because it's the only sound system we've found that will do a first-class job in every application," says Spencer Guimarin, Director of the Program, "whether in an auditorium, gymnasium, or in some cases school lunchrooms or out-of-doors."

Program representatives visit high schools all over Texas and present assemblies offering a health careers "pitch" thoroughly seasoned with entertainment and music.

"We've been using a VA302 with two standard speaker columns, two monitor speakers and 50-foot long mike cords," says Guimarin. "We appreciate the portability of the Shure system and oftentimes set it up and take it down three or four times a day. In fact, last year during the 28 weeks of the productive school year, we held 439 assemblies. To stand up to that kind of treatment, a system has to be durable, and our Shure systems require very little maintenance."

He reported that the smallest school visited had only 28 students, and the largest had 4,800. "We have to do many programs in gyms, and this is where the Vocal Master has come in most handy. The tone and reverb controls can modulate any type speaking voice so that what comes out of the columns is pleasing."

"We tried a lot of other equipment before settling on the Shure. It's the best we've found for our purposes, and schools unfortunately seldom have anything as good. We often get requests from school administrators for information on the Vocal Master, and we're happy to provide it."

"Individual channel adjustments for tone, volume and reverb make the proper blending of voices and instruments possible with the Vocal Master," says Spencer Guimarin, director of the Texas Health Careers Program, who along with other field representatives often performs with the system several times daily.



In many applications the monitor columns serve adequately when the system is used for public-address and solo instrumentals.



Rochester Institute of Technology Rochester, New York

Few institutions give the Vocal Master Sound System the workout that a large university does. Its needs typically run the gamut of variety from small indoor lectures to large outdoor rallies, from quiet folk concerts to jolting rock performances. Portability, durability, and dependability must be combined into one sound system capable of mastering every demand.

The Rochester Institute of Technology searched for such a system and finally settled on the Vocal Master. How did it perform?

We were pleased to receive these remarks from Richard K. Begbie, assistant director of the College-Alumni Union:

"Gentlemen:

"About one year ago, we purchased one of your Vocal Master Sound Systems. It was one of the best purchases we have made. At first we were rather leery of the claims made about the system. This last year has been the test, and the system has surpassed our most optimistic expectations."

"We have used the system for just about every use imaginable. It has been used in all kinds of concerts, from folk to rock to Dixieland. We have never received a complaint from any artist using the system. We have used the system for speakers of every description and in just about everyplace imaginable, including an outside rally last spring. When our permanent auditorium speaker system was down for two weeks, the Vocal Master substituted and came through with flying colors. It has been hauled all over campus and while the units visually show its handling, mechanically we have not had a bit of trouble. In fact it runs as if it were a new unit."

"I know that this praise may seem a little too much to believe, but the system has been in such constant use that we have just recently purchased a second unit so that we can be in two places at the same time."

"If anyone has any questions about your system and would like to talk with someone who has one, feel free to have them contact me."

United States Naval Academy, Annapolis, Maryland

The two-day awards and graduation ceremonies at the United States Naval Academy present special sound problems to the maintenance staff. On the first day they are faced with the problem of providing feedback-free sound coverage in the echo-prone, steel-and-glass field house. The very next day, they face the opposite problem of providing sound coverage for the 28,500-seat football stadium where there is nothing to contain the sound.

In May of 1970, two staff members witnessed a demonstration of the Shure Vocal Master Sound System and asked for a test demonstration in the Naval Academy Field House, where the awards ceremony was scheduled for June 2. The test performance surprised even the demanding Annapolis soundmen, who then began to think in terms of also using the system for the outdoor graduation ceremony. They asked for an additional test of the system in the football stadium and found that, with the addition of four more speaker columns and two booster amplifiers, they would have virtually ideal coverage.



On the first day of the two-day awards and graduation ceremonies, the system filled the United States Naval Academy's echo-prone, steel-and-glass field house with feedback-free sound coverage.

THE VOCAL MASTER

Wartburg College, Waverly, Iowa

The Wartburg College Castle Singers reflect the growing awareness by college administrators and faculty of the need to offer students an educational experience that goes beyond the classroom and touches the undercurrents of a changing time.

The repertoire of the choir, for example, includes contemporary social commentary material, selections from the rock-and-folk idiom, full-scale Broadway musical productions, and even extensive experiments with multimedia techniques—movies, slides and light patterns, reports James Fritschel, director of choral activities at Wartburg College.

The quality of the group has generated a demand on other campuses for the Castle Singers. Concert tours have taken the group throughout the midwestern states of Nebraska, Iowa, Illinois, Wisconsin, South Dakota, and Minnesota. Moreover, the box office receipts have made the enterprise completely self-supporting.

The Shure Vocal Master Sound System has accompanied the group on its tours for about the past three years, according to Fritschel. "Before we purchased it, we had no system we could carry around. We would adapt as best we could to the many sound systems we'd encounter at different colleges. This was not completely adequate, however. In fact, it was unsatisfactory. We'd have to start off from scratch every time."

But when not on tour, the Vocal Master is kept busy on the Wartburg campus. "The entire music and drama departments use it often for orchestral performances and shows," says Fritschel, "and it also serves a variety of other events."

"But when we go off campus and bring the system into a college or church (Wartburg is a Lutheran school), we invariably get numerous inquiries from people who are impressed with the system. They want to know where we got it, how much it cost, and so on. We're proud to get that kind of attention."

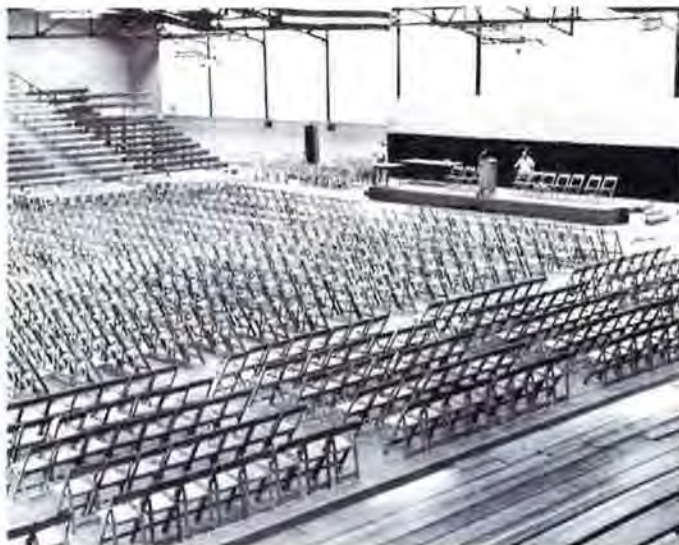
The Shure Vocal Master equipment arrived about two weeks before the busy graduation week activities and included two VA302-C Control Consoles, two PM300 Booster Amplifiers, one VA301-S Monitor Speaker, ten VA300-S Speaker Columns. Associated equipment included three Shure SM53 Microphones and one Shure M67 Microphone Mixer.

For the setup in the stadium, eight speaker columns were placed at 20-yard intervals facing the bleachers. Two other columns covered the graduating class itself, which occupied a portion of the field facing the speaker's platform. All columns were mounted on Shure stands and aimed slightly upward toward the spectators.

The Vocal Master setup in the field house—ordinarily the scene of very poor PA amplification—performed superbly, delivering the best audio ever heard there, according to the Annapolis soundmen. The system's capability will be further enhanced when the speaker columns can be mounted above the seat level, something time limitations made impossible.



On the second day equally effective coverage was provided for the huge 28,500-seat stadium, where there was nothing to contain the sound.



The Vocal Master System at Florida Southern provides sound coverage for the school's large field house. Four speaker columns are used, with two placed side by side on both sides of the stage. For some events two additional columns are used.

Florida Southern College, Lakeland, Florida

New acoustical life has been given to the field house at Florida Southern College with the purchase of a Shure Vocal Master Sound System, according to Mack Gieger, assistant dean of students. For some years the college had limped along with individual speaker cones mounted in the rafters, an arrangement that constantly interrupted speakers with the shrill wail of feedback. Not only did the Vocal Master end the feedback problems, says Gieger, but coverage was vastly improved. "Lakeland High School used our field house last June for their graduation," he says, "and some of the speakers spoke in rather low voices. Yet everyone I talked to said they could hear every word, even in the most remote areas of the building. On the other hand, one of the amazing things was that I was sitting only a few feet from two speaker columns on the left of the stage, and they didn't blast at me at all."

Florida Southern has devised a rather unique arrangement for the four speaker columns customarily used in the field house. Two columns are mounted on a stand approximately two feet off the ground. They stand side by side, but are aimed slightly apart to project sound to a maximum range. One duet of columns sits to the left of the stage and another to the right.

The school originally purchased four speaker columns. But, as Gieger tells it, "When the Lettermen played a concert here, they connected our four speakers with their Shure Vocal Master System and the results were fabulous. It was their soundman who recommended we get at least two more columns."

The Vocal Master is also used in Florida Southern's 1,800-seat auditorium, where the built-in system is sufficient for speakers, "but is not versatile enough to properly balance voices and instruments in a musical performance," according to Gieger.



Soundmen set up the Vocal Master System for a Lakeland High School graduation ceremony, held in the Florida Southern field house. One of the school's five Shure PE585 Unisphere Microphones gets a final test.

THE PRESTIGE SHOWROOM AND RESTAURANT— *where great sound is a necessity... not a luxury*

Las Vegas and Lake Tahoe—those two pockets of pleasure and play in the West—take some things very, very seriously. Things such as sound, for example. Here, the most famous performers in the world give their best to the most sophisticated audiences anywhere, and they expect the best from the sound systems they're provided with.

It follows that in entertainment meccas, such as Vegas and Tahoe, one finds not only the finest sound engineering technology, but the finest equipment. That's why the name Shure is as common there to the sound experts behind the consoles as the names Tony Bennett and Elvis Presley are to the paying customers at the tables.



**Kings Castle
Lake Tahoe**

Four monitor speaker columns are used with the Vocal Master Sound System in the main showroom at Kings Castle. Two serve the performer downstage, and two others are placed upstage for the orchestra.

A new luxury hotel entering the big time entertainment sweepstakes in Las Vegas or Lake Tahoe has a wide range of choices open to it in the selection of sound equipment. In a way, though, this is an advantage. First, the newcomer is in a position to learn from the mistakes made by his predecessors. And second, of course, he enters at a time when the technology of the modern sound system is more advanced than ever.

The story of Kings Castle, an elegant new hotel in Incline Village on Lake

Tahoe, is a case in point. Opened in July, 1970, the main showroom was inaugurated by Buddy Hackett. The management knew that there could be no compromise in the selection of a sound system for a room that planned to showcase that kind of talent.

So the management sought out the best advice possible and finally settled on a Shure Vocal Master Sound System.

The next question was how best to use it. The main showroom at Kings Castle is dominated by a proscenium arch facing the audience and built to

curve out toward the audience. It was decided that for the best coverage the Shure speaker columns—six of them—should be mounted above the stage so that their angles toward the audience followed the curve of the arch.

"All six cover 180 degrees and fill the room perfectly with no dead spots," says Sy Lein, stage manager at Kings Castle. "We also use four monitor speakers. Two are downstage for the artist, and two are upstage for orchestra."

"The only problem we occasionally have is feedback from the monitor speakers, when an act requires six or eight microphones on stage," says Lein. "So we abridge, adjust, and compensate power output and monitor speaker position. We never have a feedback problem from the six main speaker columns, however."

The six main columns are connected to three VA302-C Consoles in the booth. This insures ample wattage to drive the powerful speakers.

Kings Castle uses two additional Vocal Masters in its lounge, which is about a quarter of the size of the main showroom. Yet, there is no overkill in such a small room.

Two other Vocal Master Sound Systems consisting of four main speaker columns and four monitors are used in the lounge at Kings Castle and are controlled by the consoles shown at the left.



Harrah's Lake Tahoe



A view of the bandstand at Harrah's shows how the speaker columns were originally mounted. Subsequently, it was decided to hang them vertically. The VA300 console is located

behind a small trap door on the side of the stage (far right). The microphones are Shure Model 546 Unidyne III's and 549 Unidyne IV's.

Not only is the Shure Vocal Master a common sight in the newer entertainment palaces and lounges, but it's just as likely to be found in more established theater-restaurants. A case in point is world-famous Harrah's, Lake Tahoe, Nevada.

For many years Harrah's had used a theater system in its cabaret lounge. But with the speakers installed in the ceiling and pointed straight down, there was often the annoying problem of hot spots—a small area hit with excessively loud and brilliant speaker

projection. Moreover, there were also feedback problems, according to Herb Swartz, soundman at the hotel.

So a single Vocal Master was substituted for the theater system, and the results have pleased everybody—both customers and performers. The VA302-C is able to punch out peak power much more consistently than the previous unit could. The VA302-C has operated 24 hours a day for a year without any problems.

Because the lounge opens directly into the gaming area and is separated

only by a wrap-around bar and a Plexiglas shield hung over the entrance way, it was first decided to hang the speaker columns horizontally. This permitted the Plexiglas shield to catch some of the sound and help contain it in the lounge.

"It later developed that some of the performers felt the character of the sound changed as one walked across the room," says Swartz. "So we placed them vertically and installed a glass baffle to help contain the sound. Now, everybody's uniformly happy with it."

Landmark Hotel Las Vegas

The Shure Vocal Master Sound System is a favorite in the smaller, more intimate lounges that feature variety acts as well as the major showrooms where the super stars dwell. Take the Sky Bar, a comfortable room that sits atop the Landmark Hotel in Las Vegas. Encircled by a ribbon of glass, it offers its patrons a spectacular night view of the flickering city that never sleeps.

"We selected the Vocal Master," says Don Funk, the hotel's sound engi-

neer, "because it was a complete package with no installation problems. Furthermore, we've always heard that it's the best there is and as good as any package we could put together ourselves. We use it with four Shure microphones.

"We've also placed a monitor speaker over the stage pointing straight down, and the performers love it. They say it makes a world of difference."



At the Sky Bar of the Landmark Hotel, the Vocal Master console is located on the bandstand. The four microphones include Shure Models 546 Unidyne III's and 549 Unidyne IV's.

In spite of the fact the elevator bank cuts the room in half and blocks one's line of vision from the back of the room to either of the speaker columns, the system still fills the entire room with a perfect distribution of sound throughout 360 degrees, according to Funk.

"The speaker columns are mounted vertically as high as they will go," Funk reports. "Consequently, customers seated nearby are beneath the columns and don't get blasted."



Speakers in the Sky Bar are suspended vertically and on enough of an elevation so that they do not blast persons nearby.

Fremont Hotel Las Vegas

There are a growing number of showrooms and lounges in the Las Vegas and Tahoe areas that are experiencing a mounting dissatisfaction with theater-type sound systems that use individual speakers mounted face-down in the ceiling. Many have elected to use alternative systems, such as the Shure Vocal Master.

One is the Fremont Hotel in Las Vegas. Dissatisfied with the sound system they had been using, the management sought the advice of Bill Porter, nationally famous recording engineer

and president of United Recording Corporation of Nevada in Las Vegas.

"Before, they'd been using a Mickey Mouse thing with speakers mounted in the ceiling—a theater-type system," says Porter. "Their problem was that they were not able to get enough coverage without pushing the volume up too high.

"The Vocal Master System was the answer, but the question was how best to place it. The room has a very low ceiling, and I felt that the best coverage would be achieved by a horizontal

mounting of the speakers. You'd be surprised at the angle of coverage you can get by changing the dispersion angle and putting the columns on a different plane. So we placed them behind the wall on either side of the stage and a little bit forward."

The console panel is placed on the side of the room and is operated by a soundman. The only control the performers have over it while on stage is through a foot pedal which switches the reverb on and off.

THE PRESTIGE SHOWROOM AND RESTAURANT— Chicago and New York



One of the most successful theaters-in-the-round in America is the Mill Run Theater. Shure speaker columns are mounted on the circumference of a large hood that hangs over the stage and conceals all lighting gear. In this manner full-bodied sound projects out from the center of the theater to cover all areas of the audience that encircles the stage.

The Mill Run Theater is located in the north mall of the Golf Mill Shopping Center in Niles, Illinois, a northwest suburb of Chicago. The spring-summer-fall line-up of talent booked into Mill Run regularly includes such Las Vegas heavyweights as Sammy Davis, Jr., Danny Thomas, Buddy Hackett, Jack Benny, and many others.

Mill Run is a unique theater-in-the-round that features a revolving stage. The ceiling rises two stories but swoops down over the stage to form a circular hood that contains and conceals all lighting fixtures. The permanent sound system includes a total of twelve Shure VA301-S Monitor Speaker Columns. Eight are mounted on the outer rim of the hood on two levels and cover all seats with an even flow of sound. The remaining four are used on stage as monitors.

All stage microphones (which include three SM58's, two 565 Unisphere I's and a

546 Unidyne III) are routed into two M68 Microphone Mixers, an M63 Audio Master, and a Power Master booster amplifier, all of which are located discreetly on stage. A series of cables are then passed through a group of unique collector rings which transfer the audio to another group of cables. This allows the stage to revolve. From here, the electronic mix is carried up to the control booth overlooking the theater.

Here sound engineer William Tyler surveys all audio elements as they are collated into a single Vocal Master console and a second Power Master booster amplifier. An additional monitor speaker gives Tyler the same output the audience hears.

Wooden ceiling arches and deep pile carpet give the large theater a soft, natural acoustical character, ideal for the rich coverage provided by Mill Run's Vocal Master Sound System.

Mill Run Theater Niles, Illinois



Elegant dining in a sumptuous atmosphere has made the Rainbow Room famous around the world. When the "house" Vocal Master Sound System is needed for a special function, speaker columns are mounted on pedestals flanking the main curved staircase. The console is permanently placed in a closet off the room and out of view.



Speaker columns are secured by wire to steel casements that rise from the floor to the ceiling. At the top of the balcony is a huge wine storage facility.

When you take the express elevator to the 65th floor of the Rockefeller Center Building in New York, you have two choices. You can turn left and visit the famous Rainbow Grill, where you might see such regulars as Duke Ellington, Jonah Jones, or Benny Goodman performing. Or you can turn right and visit the Rainbow Room, where you'll dine in elegance while you watch the lights of the city flicker below.

Although essentially a dining room, the Rainbow Room found it has frequent use for a sound system. Private parties often take over the room and feature small bands, live entertainment, or even movies.

The selection of a specific system presented problems, however. The installer, Alex Rosner, did not wish to intrude upon the lavishly decorated room with permanently installed speaker columns, especially since they would be used only occasionally. Moreover, the room is partially encircled by a balcony that also serves as a wine storage facility, making permanent placement even more difficult. Ceiling speakers were a possible alternative, but

Rosner did not feel they delivered the best performance.

Another argument against a permanent installation was cost. Not only would installation be more expensive, but a permanent system would require an employee of Rockefeller Center, Inc., to run it.

"What we finally did was install a Shure VA302-C Console on a permanent basis in a storage area," Rosner says. "Permanent wiring was also put in. When the full system is needed, the speakers are merely wheeled out and plugged in. It's a simple job that can be performed by anyone. The console is usually run by the manager. Two full columns are used along with a VA301-S Monitor Speaker."

Between the Rainbow Room and Rainbow Grill, there is a large and varied collection of microphones available for use with the Vocal Master. This points up a key advantage of the VA302-C, Rosner says. "The individual tone controls for each input permit one to compensate for the different characteristics of the various nonmatching microphones. It's a very nice feature."

Rainbow Room, Rockefeller Center New York

Holiday Inn Spokane, Washington

Fred W. Kester, Innkeeper of the Holiday Inn, Spokane, Washington, hopes ultimately to convert entirely to Vocal Master for all his motor inn's public-address needs. For the time being, however, the Vocal Master is used in the cocktail lounge. It's not a permanent installation in the sense that it's built into the room. When Kester pulled out a piano bar that had been in the lounge, he put in a little bandstand with Vocal Master speaker columns placed on the stage floor, one on each side. "We never move it out," he says, "because it's in use there five hours a night, six nights a week."

Kester's Holiday Inn also has a large banquet room that seats about 300 people. It presently is equipped with one of two small portable sound systems. It's an adequate system, he reports, but after hearing the Vocal Master perform in the lounge, he says he'd definitely prefer replacing the banquet room unit with another Shure system.

"I recently bought a couple

of Shure 545 Unidyne III Microphones to use with the little portable system," he says. "I was very impressed at the difference they made. It functions so much better now than it did when I was using the microphones that came with it."

"As for the Vocal Master, we've used it with entertainers who sing, play drums, organ, piano, bass, and the whole works. We've found it to be great, especially the reverb controls on it. We work it in a small room, but the coverage is never too loud. The system we used in there before had speakers built into the lounge. Actually, it was designed for only background music. When we decided to use it as a PA system, we connected an amplifier to it, but it never gave me the tone I wanted."

"I first became acquainted with the Vocal Master through a friend (who works in the Clark Evans Music Company here). I rented it for a month to try it out, and then bought it. In fact, I subsequently recommended one of these systems to another place like ours. The

owner bought an identical installation after seeing ours work."

Kester said he fully intends to use a Vocal Master System in a second Holiday Inn he plans to build soon in Spokane. "I'd like to build it right into the banquet room during construction."

A typical act at the Holiday Inn in Spokane, Washington, is the Luna Brothers, who perform nightly in the lounge. A pair of Shure Model 545 Unidyne III Microphones are used with the system.



The Vocal Master console is operated from the stage and sits within easy reach of the organ player.

Winners Inn Winnemucca, Nevada

The Vocal Master Sound System serves double duty at Winners Inn, located in the heart of mining and resort territory in Winnemucca, Nevada, 167 miles northeast of Reno. Set up permanently in the dining room-lounge combination, which seats about 80 persons, the system serves both entertainment and business functions.

The room has a stage up front and the seating arrangements can be varied to suit any circumstance. The only permanent seating are the 30 booths installed around the edges of the room. Although the Inn was first built in 1947,

a recent \$2.5 million remodeling job has made it an efficient site for many functions.

"We use this room very often for business meetings, conventions, conferences, and speeches," says Randy Eiguren, general manager. "There are usually two or three such meetings a week, including the Lions Club and Kiwanis Club meetings. Everyone seems to enjoy this town for conventions, so we're constantly using the Vocal Master in such situations. Moreover, with all the inputs on the Vocal Master console, we're very well equipped to amplify a panel discussion involving several persons, each

with his own microphone."

Winners Inn also features entertainment very often. "I'm not very familiar with sound installations," says Eiguren, "but I've noticed that all the entertainers who use it are very enthusiastic about it. We use four microphones on stage, and one person is in charge of setting up and operating the system."

All microphones used with the Vocal Master are Shure units. Furthermore, Eiguren has an additional seven Shure microphones connected to the paging and public-address system, which includes 150 speakers throughout the building.



Performers who use the permanently installed Vocal Master Sound System at Winners Inn are uniformly enthusiastic about it. Because the room is small, feedback might be a problem with a lesser system, but not with the Vocal Master, even when the performer works close to a speaker column. The microphone is a Shure Model 565 Unisphere I.

Hyatt House Burlingame, California

"It's probably the finest system made, as far as I'm concerned," proclaims Bill Griffin, general manager of the Hyatt House in Burlingame, California, just south of San Francisco International Airport.

When Griffin first converted his piano bar into a moderate-sized show lounge, he tried experimenting with sound systems. "I had a couple of speakers and an amplifier, but

they weren't doing the job. After two months, I decided to change."

"I first became acquainted with the Vocal Master about this time. I booked an act for a six-month stand and decided to rent a Shure Vocal Master from a Los Angeles distributor to see how it worked. It was great. I was as sold on it as the performers who used it. As soon as I could, I bought one

outright.

"The room here is T-shaped with the righthand side of the T knocked off. The entrance is on the right at the bottom of the T. I placed a speaker column over the entrance, and this covers the bar area. The other column is located at the top of the T and projects into the left wing of the room. I find these two speakers give me great coverage over the en-

tire room.

"The group itself works right at the base of the T and uses a monitor speaker placed right in front of them."

"Occasionally, the Vocal Master System serves double duty in our banquet room when a large function needs a first-class sound system. In these situations we use everything except the monitor speaker."

"We're extremely happy with the Vocal Master, and the performers who come in and use it become Shure-sold." So says James Heelan, president of ABC Bowl and Recreation Corporation and manager of ABC Bowl, Norfolk, Nebraska.

ABC is much more than a bowling alley; it's a general recreation center that is highlighted by a very plush lounge, adorned with deep carpet, draped walls, and an acoustical ceiling. Here, Heelan

books and runs live acts six nights a week, changing the bill an average of every two weeks. Being strictly a showroom seating up to 200, a quality sound system is called for.

"I considered many systems, talked to many persons, and corresponded with a lot of manufacturers," he recalls, "before finally settling on a Shure Vocal Master. Although it offers much more than we can use, and we only operate it at about one third of its max-

imum power, we could use it in an auditorium without any strain. We thought as long as we were in the market for a system, we might as well get the best available."

Heelan uses a monitor speaker in addition to the two columns, which are permanently installed. The speaker columns are permanently mounted in a horizontal position above and on each side of the stage. The monitor speaker is used on stage.

"Many of the entertainers that come here have their own equipment, because they're used to bad house systems," Heelan explains. "Many bring in units that I'm sure are more expensive than the Vocal Master. They start with their own equipment, but invariably switch to the Vocal Master house system. Even some who regard their own equipment in a highly personal manner will tinker with the Shure system at rehearsal in the afternoon and decide to go with it that night."

"Some have even asked me about cost and retail outlets with a view toward getting one for themselves."

Along with the Vocal Master, Heelan uses five Shure microphones: a 585 Unisphere A, two 548S Unidyne IV's, a 565 Unisphere I, and a 55SW Unidyne II. In his small lounge, feedback could be a serious problem with a powerful system, he reports, but it's all easily controlled from the console without any interference to the performance. Occasionally, instruments are run through the system for added amplification.

"As I said, we're extremely happy with the Vocal Master, and there is nothing I've heard that compared with it," says Heelan.

**ABC Bowl and Recreation Corporation
Norfolk, Nebraska**



Mounting the Vocal Master speakers horizontally above and on each side of the stage provides the lounge of the ABC Bowl and Recreation Center with the best coverage. A monitor speaker is also used on stage. The microphones are a Shure Model 548S Unidyne IV (left) and a Model 55SW Unidyne II.

Sound at Sea

NORWEGIAN CARIBBEAN STEAMSHIP LINE—

Norwegian Caribbean Steamship Line Miami, Florida

The Norwegian Caribbean Steamship Line faces an acoustic problem aboard ship similar to that faced by those who must provide effective sound coverage in large field-house buildings. The problem is to insure uniform, natural sound reinforcement in an enclosure that is predominantly steel.

Each of the three ships now in the Norwegian Caribbean Line (there will soon be a fourth) has a main lounge that features singers, comics, novelty acts, and instrumental groups. The rooms vary in size from 200 seats aboard the Steamship Sunward to 350 aboard the Skyward.

"The problem is," says Helen Finlay, director of entertainment for the line, "that because they're on ship, the rooms are largely steel. There is carpeting on the floor and the ceiling is of normal height, but there's very little draping, so as not to block the sight of the sea."

"When I first took charge 2½ years ago, we were really having terrible trouble with the sound. We were using a system that had been made in Europe, but wasn't geared to entertainment needs at all. It consisted of overhead speakers spaced periodically. They were much too small, they easily distorted, and the distribution of the sound was very uneven. Moreover, the general piercing quality of the system made every act sound as if it was performing in a tin can."

"As I visited the better showrooms in the Miami Beach area, I began to notice one thing their sound systems all seemed to have in common. They all used large speaker columns rather than

permanent ceiling or wall speakers. The builders with the Norwegian Line had already invested considerable money in trying to improve the systems aboard ship, but without much success. Marine architects don't seem to fully understand the acoustic needs of entertainers."

"Finally, I went to Ace Music, and they provided us with three Shure Vocal Master Systems. The improvement is very impressive, and we're all very pleased with the way they've performed aboard the ships. In terms of the equipment we're now using, I think we've accomplished our goal of putting out really effective sound coverage for our lounges."

Shure microphones complement the Vocal Master in the main lounge of each ship.



As the Steamship Starward weaves its leisurely way through Jamaica, Freeport, Kingston and other Caribbean points, travelers may treat themselves to entertainment in the ship's 300-seat lounge area, where a Shure Vocal Master helped solve the problem of delivering pleasing sound in a steel and glass enclosure.

EDGEWATER HOSPITAL INTEGRATES THE VOCAL MASTER INTO SURGICAL VIDEO TAPE CENTER

Edgewater Hospital, Chicago, Illinois

For an institution of its size (400 beds), Edgewater in Chicago can boast one of the most sophisticated audio-video installations in America. On the sixth floor, there is an extraordinary, custom-designed color TV camera mounted over the operating room and capable of telecasting delicate surgery on a closed circuit line to an auditorium on the eighth floor. All TV control and taping consoles are on the sixth floor near the operating facility.

The auditorium upstairs is not only equipped to receive the telecasts from surgery, but also has its own independent sound system. Until recently, however, there were certain weaknesses in the auditorium system, according to Herbert Versen, electronic technician at Edgewater. "It didn't have enough power, it gave tremendous feedback, and the tubes heated up terribly," he recalls. He sought the advice of professional sound installers, who suggested he try the Vocal Master system.

He did, and admits the decision was a wise one. Although the system has been permanently installed in the auditorium, he reports it is highly compatible with the video system downstairs. "We looped three auditorium microphones through the Vocal Master panel and down into the video console," says Versen. "This setup permits us to tape lectures and panel discussions originating in the auditorium. We take the audio feed directly from the Vocal Master."

The auditorium also is used for fashion shows and other non-clinical fund-raising events, Versen points out.

Electronic technology at Edgewater will be expanded still further two years from now when completion is expected on an eight-story, 80-bed emergency Medical Care Institute complete with a rooftop heliport.

"We intend to have a special unit with teaching amphitheatres on the eighth floor, and I hope to equip it with a video monitor capable of feeding a live color image onto a 15-by-20-foot screen," he says. "If we put in a new sound system, it will certainly be a Vocal Master. I like the solid state design, the many inputs it has, and the reverberation system on it. What I've heard so far tells me nothing can compete with it."



Vocal Master speaker columns are permanently installed on specially built shelves at the rear of the Edgewater Hospital auditorium and lecture hall. The Vocal Master console is looped into a video tape center two floors beneath and permits the recording of lectures off the PA feed.

The man who runs all aspects of the system is chief electronic technician Herbert Versen, pictured here in the video tape center two floors below the auditorium. The microphone is a Shure Model 585 Unisphere A, and the console includes two Shure M67 Microphone Mixers installed just to the right of the telephone receiver.

"We tried everything"



When a presentation is made from the stage itself, the Vocal Master console is conveniently located in the wing. Speaker columns remain on stage flanking the lecturer. The microphone is a Shure Model 545 Unidyne III.



Speaker columns are customarily placed on stage during most functions. Here, however, seating arrangements have been converted to face a projection screen at one end of the ballroom for a travelog program. For such programs, speakers flank the screen.

South Shore Country Club, Chicago, Illinois

"Before we got the Vocal Master, believe me, we tried everything."

Listen to Albert Salah, managing director of the South Shore Country Club in Chicago, describe his frustration in meeting the audio needs of South Shore as well as the experiences he had when manager of a large hotel on the West Coast.

"We offer frequent travelogs in our ballroom for audiences that number between 200 and 250. The movies are sometimes run with accompanying music and always with a live commentary by a narrator. Before the purchase of the Vocal Master, we had tried all kinds of speaker combinations in the ballroom. We had speakers in the ceiling, and we had speakers in the columns surrounding the room. When they were in the ceiling, the sound bounced off the floor; when we had the sound coming from the columns, that was just as ineffective. We got all this feedback."

Salah talked with an audio consulting firm which recommended the Vocal Master and volunteered to let Salah try one out.

The system now serves a variety of functions at South Shore. In addition to the travelogs, Salah uses it with various dance orchestras and vocalists who perform at the club. For smaller events, it can be easily moved into the dining room or the Crystal Room for similar duty.

"At our annual meeting we used the Vocal Master along with three microphones," Salah says. "One was for the president at the speaker's rostrum, and two others were placed on either side of the room for those who wanted to make comments from the audience."

At South Shore Country Club, all setups and operations are handled by an engineering department. When used in the ballroom, Salah reports, the speaker columns are placed on the stage, since experience has shown that delivers the best coverage. When the travelogs are run, the columns are placed on tables on either side of the screen, because the curtains are drawn.

"The beauty of the system," says Salah, "is that the ballroom can seat up to 800. Yet when we take it into another room that may seat only 200, we get equally fine sound. It's never too weak in the big room, nor too overpowering in the small room."

"I'm very happy with it."

A GUIDE TO THE VOCAL MASTER... THE ONE THEY'RE ALL TALKING ABOUT



**POWER MASTER®
BOOSTER AMPLIFIER
MODELS PM300 AND PM300E**

Designed especially for use in conjunction with the Vocal Master Systems, the Power Master drives two *additional* VA300-S Speakers or four VA301-S Monitor Speakers. It adds 100 watts RMS of fully useable, *extra* power to either the VA300 or VA302 Vocal Master Systems, Model PM300 — 120 V. AC, 60 Hz; Model PM300E — 120 or 240 V. AC, 50-60 Hz.



**MONITOR SPEAKER
MODEL VA301-S**

Developed especially for feedback-free monitoring applications right on stage, the VA301-S is directional, and features a built-in volume control that gives the performing group tight control over its output—and tight control over feedback.



**PROFESSIONAL
ENTERTAINER
MICROPHONES**

Responsive, reliable Shure Professional Entertainer Microphones (preferred for their superb sound qualities by professional entertainers throughout the world) team up with your Vocal Master to give you flawless sound wherever you appear. Choose from the world-famous Unidyne® Series or the great-looking, great-sounding "ball-type" Shure Unisphere® Series.

The Vocal Master is a complete vocal arrangement and projection system, featuring a Control Console and Speaker Columns, especially designed for penetrating power¹ over the entire vocal range.

The Vocal Master delivers up to 300 watts of available vocal power and is conservatively rated at 100 watts RMS* continuous. The console has six input channels, each with its own individual volume, treble, bass, and reverb in-out (and auxiliary echo) controls.

It can be used with dynamic, ribbon or condenser microphones of appropriate impedance; electrified instruments, tape recorders, echo devices, remote reverb switches, and any of the Shure microphone mixers (when additional input channels are desired).

Master controls (which may be used without disturbing individual settings) include a master volume control, master reverb in-out switch, master reverb intensity control and master reverb treble and bass controls. Four anti-feedback switches, each operating in a sub-range of the total audio spectrum, help you to overcome feedback, the greatest enemy of a good performance. Advanced design concepts throughout assure long, trouble-free performance with the Vocal Master. Space-age solid-state circuitry, coupled with thermal overload, open-circuit-proof, and short-circuit-proof circuits, protect the Vocal Master electrically. The Vocal Master also has a thermal overload indicator light (special circuitry automatically shuts the unit off if unusually high circuit-damaging temperatures are reached). The entire control panel is illuminated for use on dimly lit stages.

The Control Console is short circuit-proof and open circuit-proof. If it is switched on without a speaker column connected, the console will not be damaged. This is exclusive with the Shure Vocal Master.

It comes complete with interconnecting cables. The Vocal Master is guaranteed for one year and is Underwriters' Laboratories, Inc., listed. A complete line of custom-designed accessories is available for the Vocal Master, including traveling covers, speaker and console stands, and plug-in transformers that adapt your Vocal Master for use with microphones of different impedances.

VOCAL MASTER SPECIFICATIONS

Model VA300	Consists of a Model VA300-C Control Console (with high impedance microphone inputs) and two Model VA300-S Speaker columns.	
Model VA302	Consists of a Model VA302-C Control Console (with low impedance microphone inputs) and two Model VA300-S Speaker columns.	
Model VA302E	Same as Model VA302-C except for 120 or 240 V. AC, 50-60 Hz and listed by the C.S.A. testing laboratories as approved.	
Model VA303	Consists of a Model VA300-C Control Console (with high impedance microphone inputs) and four Model VA301-S Monitor Speakers.	
Model VA304	Consists of a Model VA302-C Control Console (with low impedance microphone inputs) and four Model VA301-S Monitor Speakers.	
Model VA304E	Same as Model VA304 except for 120 or 240 V. AC, 50-60 Hz and listed by the C.S.A. testing laboratories as approved.	

Both Models VA300-C and VA302-C are Underwriters' Laboratories, Inc., listed.

	VA300-C	VA302-C & VA302E-C
CONSOLE:		
Power Output	100 Watts R.M.S. Continuous* 300 Watts Peak Available Voice Power*	
Gain	60 db ("Mic" Input Level)* 49 db ("Inst" Input Level)*	80 db (Input Attenuator Out)* 65 db (Input Attenuator In)*
Frequency Response	Flat ± 2 db from 40 Hz to 20,000 Hz	
Input Impedance	60,000 Ohms ("Mic" Level) 120,000 Ohms ("Inst" Level)	Suitable for microphones having impedance of 50 to 600 Ohms
Power Consumption & Requirements	400 Watts maximum 120 V. AC, 60 Hz (Model VA302E-C—120 or 240 V. AC, 50-60 Hz)	
Weight	38 lbs.	41 lbs.
Dimensions	8 3/4" H. x 25" W. x 14 3/4" D.	
SPEAKER COLUMN:		
Impedance	16 Ohms	32 Ohms
Weight	70 lbs.	41 1/2 lbs.
Dimensions	62 3/4" H. x 15 3/4" W. x 8 3/4" D.	36" H. x 15 3/4" W. x 8 3/4" D.

*To an eight-ohm load (2 VA300-S or 4 VA301-S Speaker columns).