

# Electronic Equipment

*For*  
churches  
colleges  
schools  
cemeteries  
industries  
parks



**s c h u l m e r i c h**  
**e l e c t r o n i c s**  
**i n c o r p o r a t e d**

**manufacturers of**

**carillonic bells**  
**tower music systems**  
**voice and music distribution systems**  
**music and paging for industry**



# CARILLONIC BELLS • • • •

"Carillonic Bells" is a carillon of bells designed and produced exclusively by SCHULMERICH ELECTRONICS, INC.

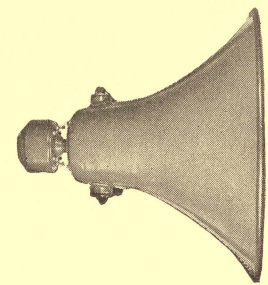
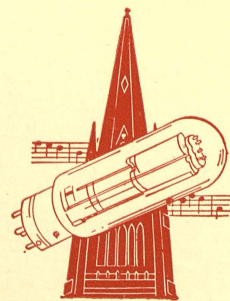
They are the product of an electronic age and musical artistry. In them are bells of surpassing beauty—bells which have set new standards for bell carillon performance. All of the many objections to cast bells have been successfully corrected through this marvel of electronics.

Never before has there been a carillon which could be played in the nave of the church—and by the push of a button be played from the tower of the church—or from the church without a tower as well.

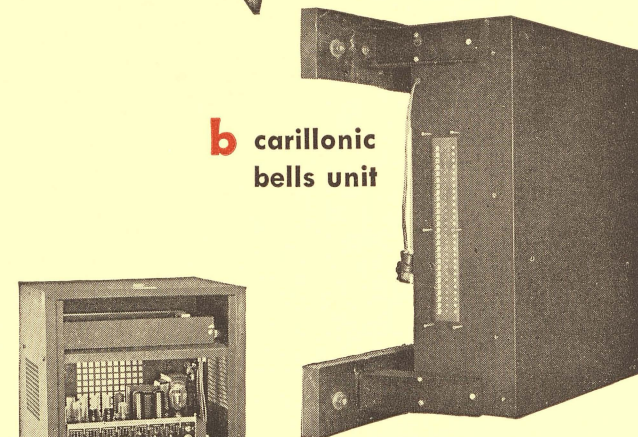
The tone volume of carillons of the past could not be controlled, whereas Carillonic Bells can sound softly or ring out with all the majestic crescendos of the largest bell carillon. Here is a bell carillon not dreamed of in the philosophy of the conventional carillonneur—a bell carillon which can be installed in any church regardless of size or architecture—a carillon which can be played by every church organist.

Carillonic Bells are played from a standard keyboard which starts with "fiddle" G and extends upward by the usual half tones for two complete octaves (twenty-five notes). Therefore any melody can be played in the key in which it is written. There is no need to transpose.

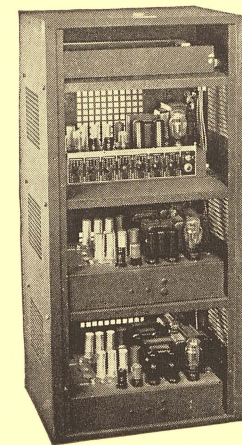
Carillonic Bells is a bell carillon for every church in the land.



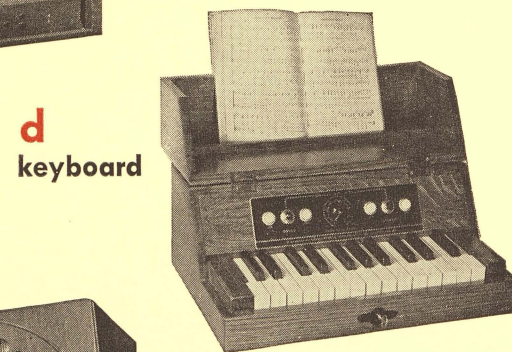
**a** tower reproducer



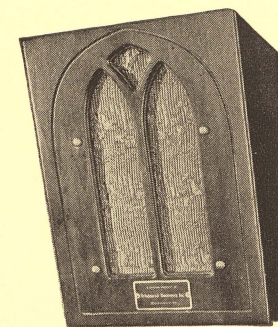
**b** carillonic bells unit



**c** control amplifiers

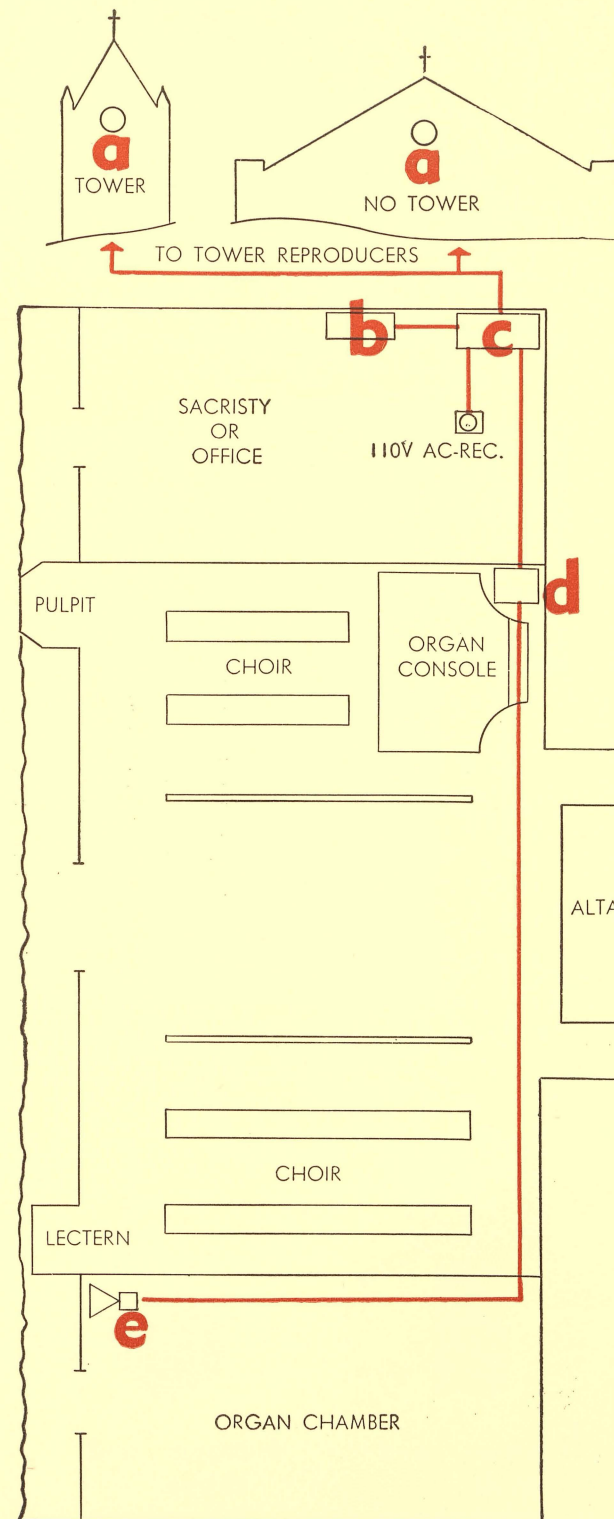


**d** keyboard



**e** organ bell reproducer

"the sweetest music ever tolled"



**a** tower reproducers—S.E. 13-133

Four required in average installation. All metal weather-proof re-entrant type horns non-resonant construction. Sealed waterproof plastic diaphragm. Power rating 44 VU continuous. Projection angle designed for use with Selective Projection.

S.E. 13-133 Dimensions:  
Bell 25½" dia. Overall length—23½" Wgt.—25 lbs. (Approx.)

S.E. 3-701 Dimensions:  
Cut out box 6" x 10" x 6" Wgt.—18 lbs. (Approx.)

**b** carillonic bells unit and  
**c** control amplifiers S.E. 50-7

Two complete octaves of chromatically tuned bell tone generators tuned to the tempered scale with A-440 reference frequency. Accuracy of tuning better than 1/20 of 1 per cent. Electric action to provide operation from organ location and/or any other locations. Supplied complete in steel case. Equipped with mounting hardware for fastening to solid masonry wall.

Control amplifiers housed in steel rust-proof ventilated enclosure. Amplifier provides high audio power with low transient and intermodulation distortion. Amplifier requirements are dependent on the area and topography of the area to which the bells are to be projected.

S.E. 50-7 Dimensions:  
Carillonic Bell Unit—31" x 27½" x 13" (overall), Carillonic Bell Amplifier—45½" x 21¾" x 18" (average system), Weight (of system dimensioned above) 330 lbs. (Approx.)

**d** keyboard S.E. 40-6

Twenty-five full size plastic covered keys mounted in solid hand-rubbed oak cabinets, provided with swivel. Force with which key is struck does not effect volume of bells. Controls mounted within cabinet turn bells on and off in church and/or in tower and regulate volume in church. Locking cabinet lid with music book support.

Dimensions: S.E. 40-6  
Front 17½" x 7" (closed), Front 17½" x 11½" (open),  
Depth 12½" (closed), Depth 15½" (open)  
Weight—19 lbs. (Approx.)

**e** organ bell reproducer—S.E. 13-123

Located in organ chamber compensated to play Carillonic Bells inside church. Volume of bell music in church controlled at Carillonic Bell Console and completely variable from zero to maximum. Impedance matching transformer self-contained.

Dimensions: 9" x 12¼" x 7", Weight—5 lbs. (Approx.)

Schulmerich Electronics, Inc. • SELLERSVILLE, PENNSYLVANIA

Electronic Equipment Manufacturers for a Quarter Century

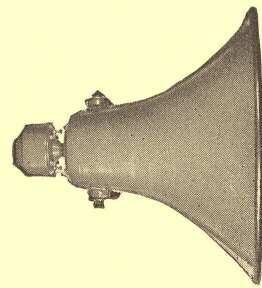
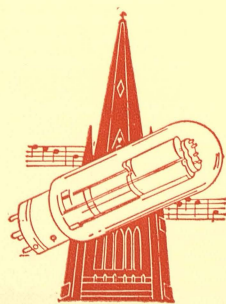


Bells and chimes in the tower of the church, have for centuries provided inspirational bell music. This has been the traditional method of bringing to the community the presence and beauty of the church. Electronic sound amplification combined in SCHULMERICH Tower Music Systems offer all churches this opportunity. Such a system:

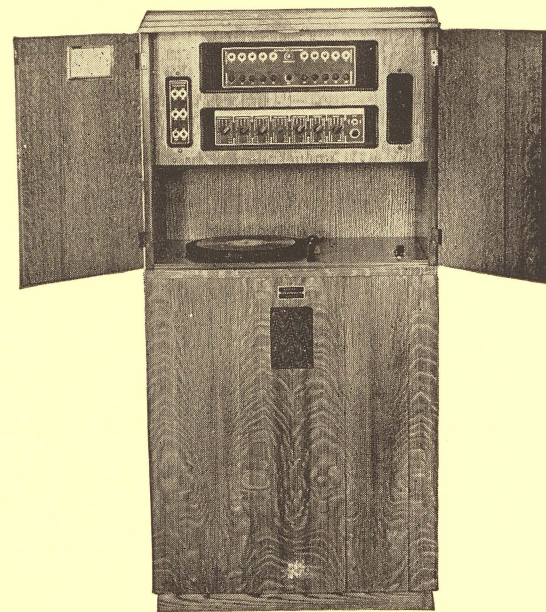
- Broadcasts organ chimes, organ, and choir.
- Projects music of phonograph records.
- Permits automatic daily music programs.
- Produces moderate volume near church yet covers great distances.
- Requires no special architectural supports.
- Is not affected by atmospheric conditions.
- Requires no mechanical maintenance—has no moving parts.

Tower Music Systems require more than standard public address equipment where tone quality is not a factor. The great musical range of the organ—the brilliant harmonics of the chimes—the delicate voice inflections of the choir—can only be reproduced by a custom-engineered music system. There can be no compromise with quality. A standard public address system is a voice system—not adaptable by any electrical magic to a Tower Music System. Tower music must be above criticism by musician or layman. It must be of proven quality. Unfavorable criticism—improperly installed or designed equipment—will defeat the intended purpose. The community must want to listen—not be compelled to tolerate this instrument.

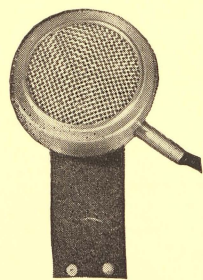
The quality of SCHULMERICH tower music systems is proved by their enthusiastic acceptance by churches everywhere.



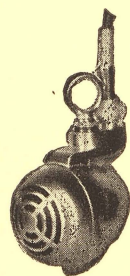
**f** tower reproducer



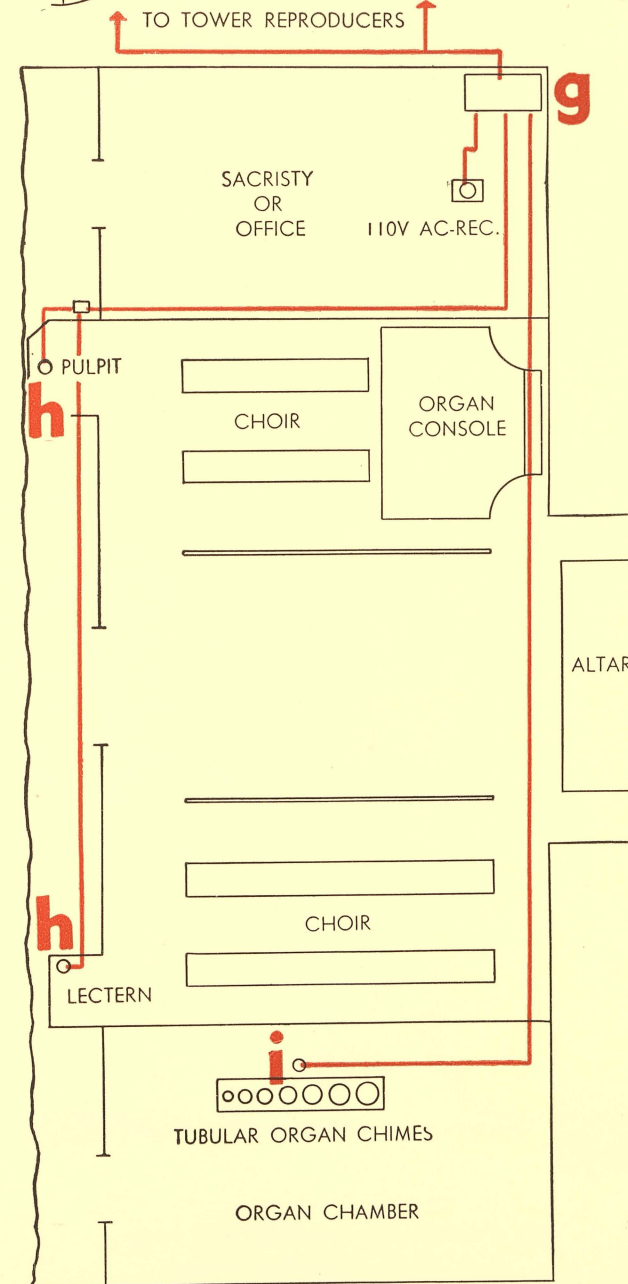
**g** deluxe control cabinet



**h** organ and choir microphone



**i** organ and chime microphone



**f** tower reproducers—S.E. 13-133

Four required in average installation. All metal weather-proof re-entrant type horns non-resonant construction. Sealed waterproof plastic diaphragm. Power rating 44 VU continuous. Projection angle designed for use with Selective Projection.

S.E. 13-133 Dimensions:  
Bell 25½" dia. Overall length, 23½", Wgt., 25 lbs. (Approx.)  
S.E. 3-701 Dimensions:  
Cut out box 6" x 10" x 6", Wgt., 18 lbs. (Approx.)

**g** deluxe control cabinet—S.E. 50A-2

Central control cabinet houses amplification and control equipment for system. Cabinet of matched quarter-sawn oak or matched walnut—hand rubbed with divided locked doors. Control equipment mounted on upper panel. Top section contains 10 (or 20) reproducer selector switches and a sound intensity indicator. Lower section contains all microphone, phonograph, frequency compensation controls, and a master on-off switch. Transcription player containing a constant speed motor assembly, pickup assembly, and control switch mounted in section below control unit. Master reproducer (with volume control in transcription section) provided for monitoring any program.

Dimensions: Height—60", Depth—23", Width—29"

**h** organ and choir microphone S.E. 5-113 and MTG Assy. S.E. 41-1

Microphone mounted in flat die-cast case with wire face grille designed for wide angle pickup. Minimum output level 50 DB below 1 volt per dyne per square centimeter. Frequency response 40-10M cycles. S.E. 41-1 requires one square inch of flat surface. Mounting bracket supplied with rubber-in-shear shock absorber. Microphone easily concealed from congregation. Supplied with shielded cable and screw type connector.

Dimensions: 2" dia.—7/8" deep.

**i** organ chime microphone S.E. 5-114

Microphone mounted in sturdy die-cast case provided with screw type connector and hanger loop. Unit designed for wide angle uniform frequency pickup. Minimum level 60 DB below 1 volt per dyne per square centimeter. Frequency response 40 to 10M cycles. Diaphragm loaded for low distortion percussion pickup. Microphone connected to control cabinet through rubber covered shielded cable.

Dimensions: 2¼" dia., 3¼" deep. (Approx.)



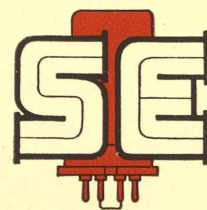
Most of the churches of today have an urgent need for acoustic adjustment. Only recently have church architects joined hands with electronic-acoustic sound engineers to correlate the beauty of the church building with one of its fundamental purposes—to provide facilities for conveying the message of the church to the congregation. That purpose can only be fulfilled by making every provision for perfect sound transmission throughout the church by the installation of a SCHULMERICH Sound Distribution and Reinforcement System.

The true fidelity amplification provided by our systems faithfully reproduces every voice characteristic—every inflection picked up by custom designed microphones concealed in the chancel. Reproducers are completely synchronized with the speaker's voice yet inconspicuously harmonized to the interior finish. The audience is only conscious of the installation by the improved hearing that becomes apparent.

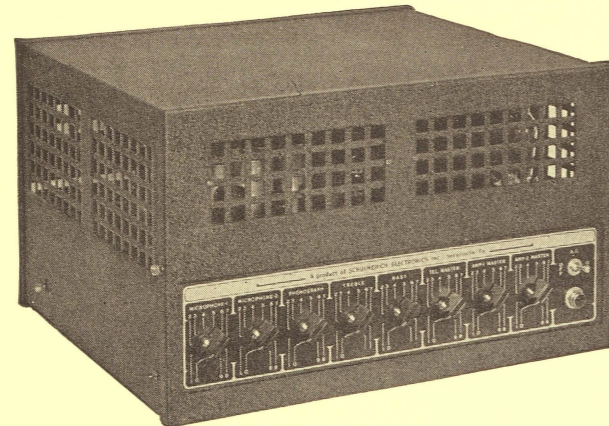
For those persons with impaired hearing, small lightweight ear equalized deaf phones on telescopic handles are installed in various pews together with individual volume controls for personal adjustment. Only when an audience can hear without concentrated effort can a message be easily absorbed.

Sound reinforcement provides for the amplification of voice and music from the Church chancel to the nave with equal distribution and natural quality.

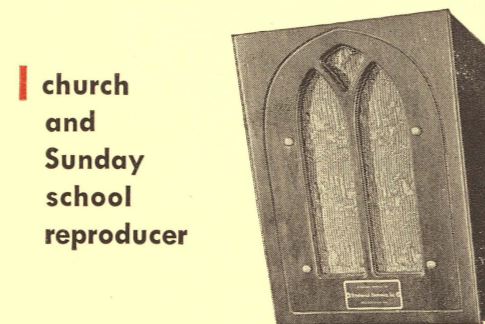
Sound distribution provides for the amplification of voice and music from one or more sources to one or more remote locations.



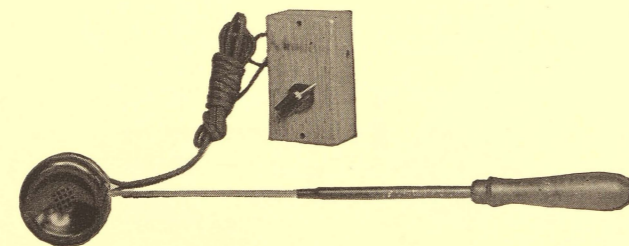
**i** chancel microphone



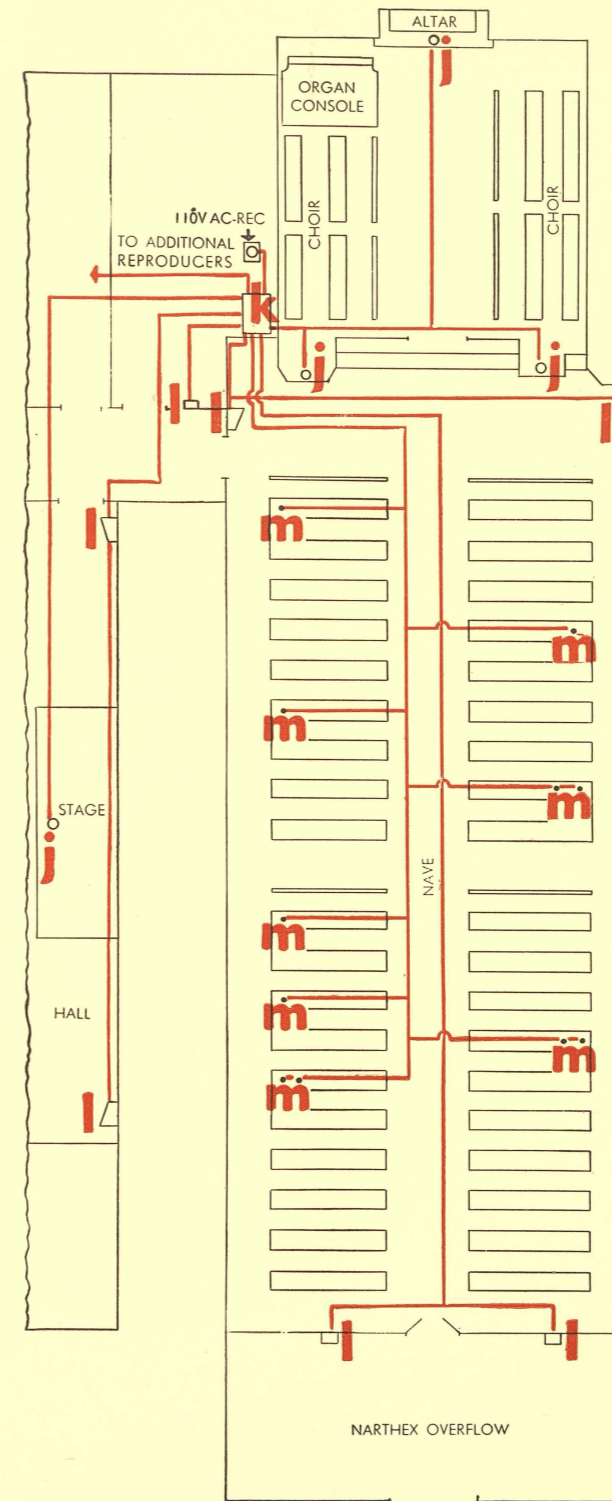
**k** dual channel amplifier



**l** church and Sunday school reproducer



**m** electric-ear hearing aid control station and receiver



**i** chancel microphone S.E. 5-113 and MTG Assy. S.E. 41-1

Microphone mounted in flat die cast case with wire face grille designed for wide angle pickup. Minimum output level 50 DB below 1 volt per dyne per square centimeter. Frequency response 40-10m cycles. S.E. 41-1 requires one square inch of flat surface. Mounting bracket supplied with rubber-in-shear shock absorber. Microphone easily concealed from congregation. Supplied with shielded cable and screw type connector.

Dimensions: 2" dia.— $\frac{7}{8}$ " deep.

**k** dual channel amplifier 6-118A Series

Two 44 VU channels can be operated separately or paralleled. Frequency response  $\pm 1$  DB - 40 - 15,000 cycles. Distortion at rated 44 VU per channel, less than 4% total harmonics with maximum of 8% intermodulation. Output impedance of 4, 8, 15, 250, 500 per channel. Input—high impedance, low impedance, or bridging. Power: 105-125 volts, 50-60 cycles, 250 watts. Designed for continuous duty.

Dimensions: 17 $\frac{1}{2}$ " wide, 12 $\frac{1}{2}$ " high, 13 $\frac{1}{2}$ " deep (Case mounted)

Weight: 65 lbs. (Approx.)

**l** church and Sunday school reproducers S.E. 13-123-6 Series

Permanent magnet cone type reproducer mounted in sturdy case with Gothic design grill. Standard case finished walnut. Special finishes available. Impedance matching transformer standard. Models available with built-in volume controls. Apertures in case provide acoustic chamber for extended frequency range. Built-in hanger.

Dimensions: 9" x 12 $\frac{1}{4}$ " x 7"

Weight: 5 lbs. (Approx.)

**m** electric-ear hearing aid control station—S.E. 36-103 receiver—S.E. 13-131

Receiver and Station mounted on rear of pews. Control stations contain volume control for receiver, socket receptacle, and built-in hook for hanging receiver.

Lorgnette type receiver, adjustable from 12 to 17 inches, equipped with 5 foot cord terminated in phone tips for insertion into socket on control station.

Eye provided in handle for hanging receiver on control station when not in use. Receiver weight 5 oz.



# Industrial Sound Equipment

## Music and paging for industry

### WHY INDUSTRIAL SOUND?

**EVERY** Industry, large or small, needs Industrial Sound.

Relationship between administration and the workman is more intimately established through messages on production and general activities **WITHOUT INTERRUPTING PRODUCTION.**

Immediate supervisory directions can be communicated to any part of the plant for production control, saving time and material loss.

Executives and key personnel can be paged for immediate contact on emergencies, telephone calls or visitors.

Music in production, office and lunchroom areas at scheduled times, lifts morale and checks fatigue.

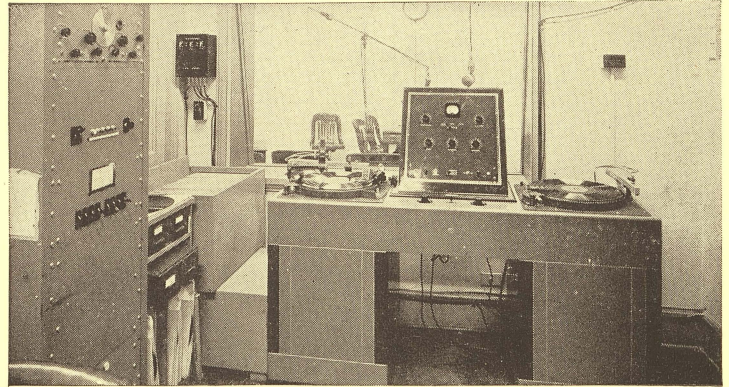
News programs of factory events during lunch and rest periods personalizes the plant.

Emergencies arising through plant damage or personnel injury efficiently and quickly controlled through supervisory announcements.

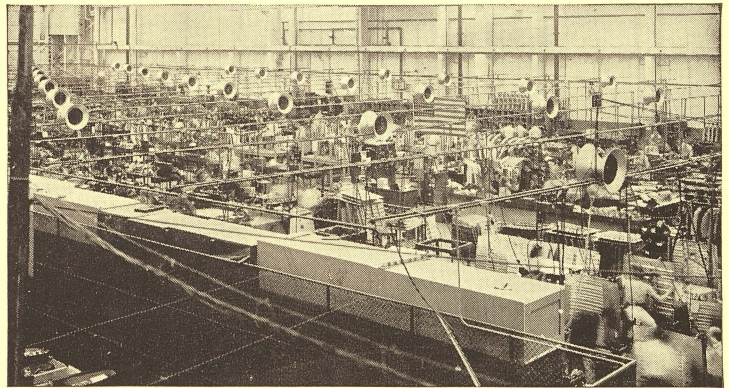
Instruction pertaining to safety or new production methods can be delivered on the spot covering the workers and machines involved.

Industrial sound equipment is an electronic instrument—the product of a modern age. It is a modern method of maintaining efficient production.

**SCHULMERICH ELECTRONICS, INC.,** offer to Industry a quarter century of electronic-sound engineering for planning, constructing and installing electronic industrial sound.



*Control Room and Studio*



*Sound Coverage in One Zone*



*Program and Zone Control Desk*



# Schulmerich Electronics, Inc.

SELLERSVILLE, PENNSYLVANIA

*Electronic Equipment Manufacturers for a Quarter Century*