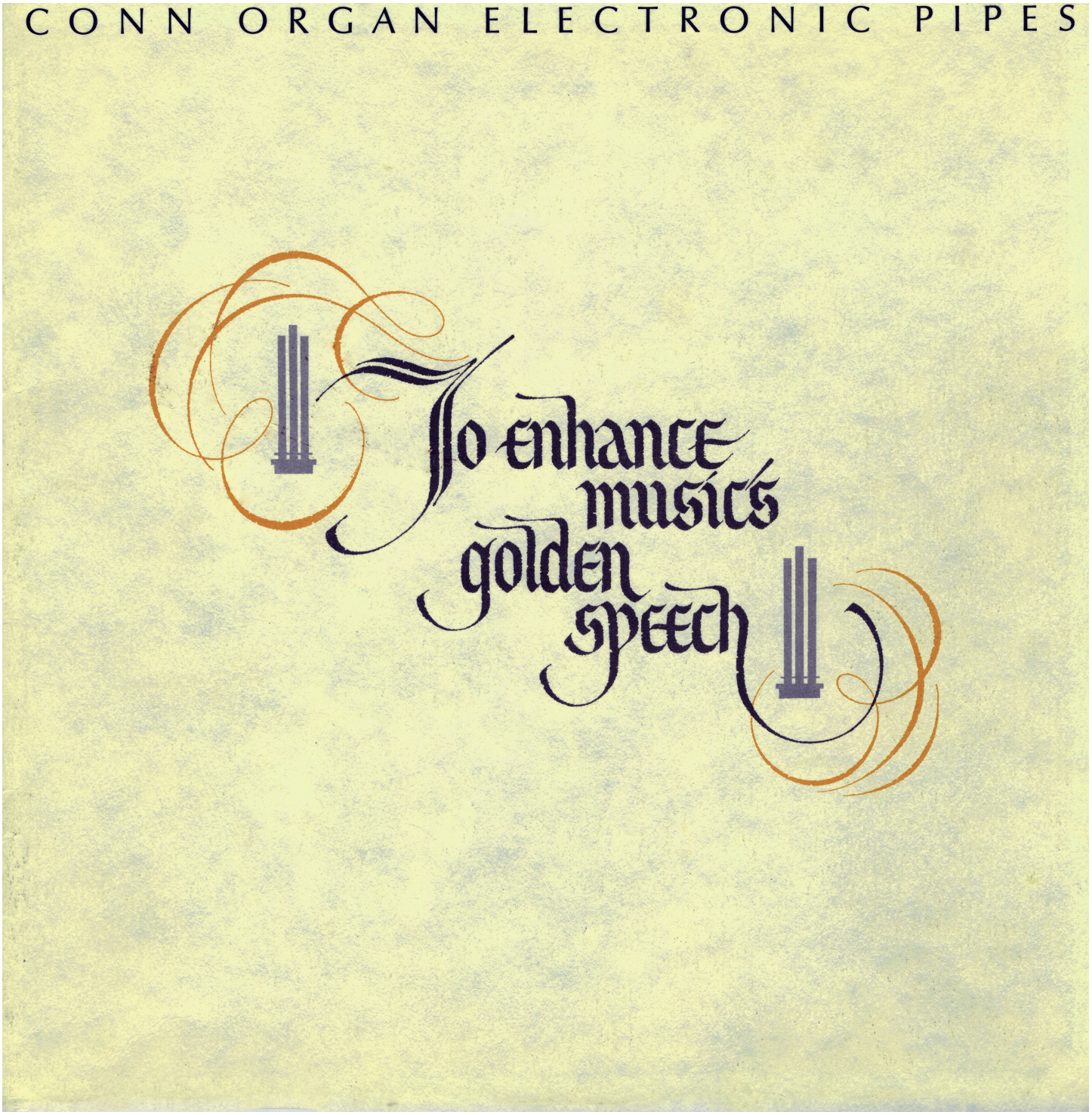
CONN ORGAN ELECTRONIC PIPES



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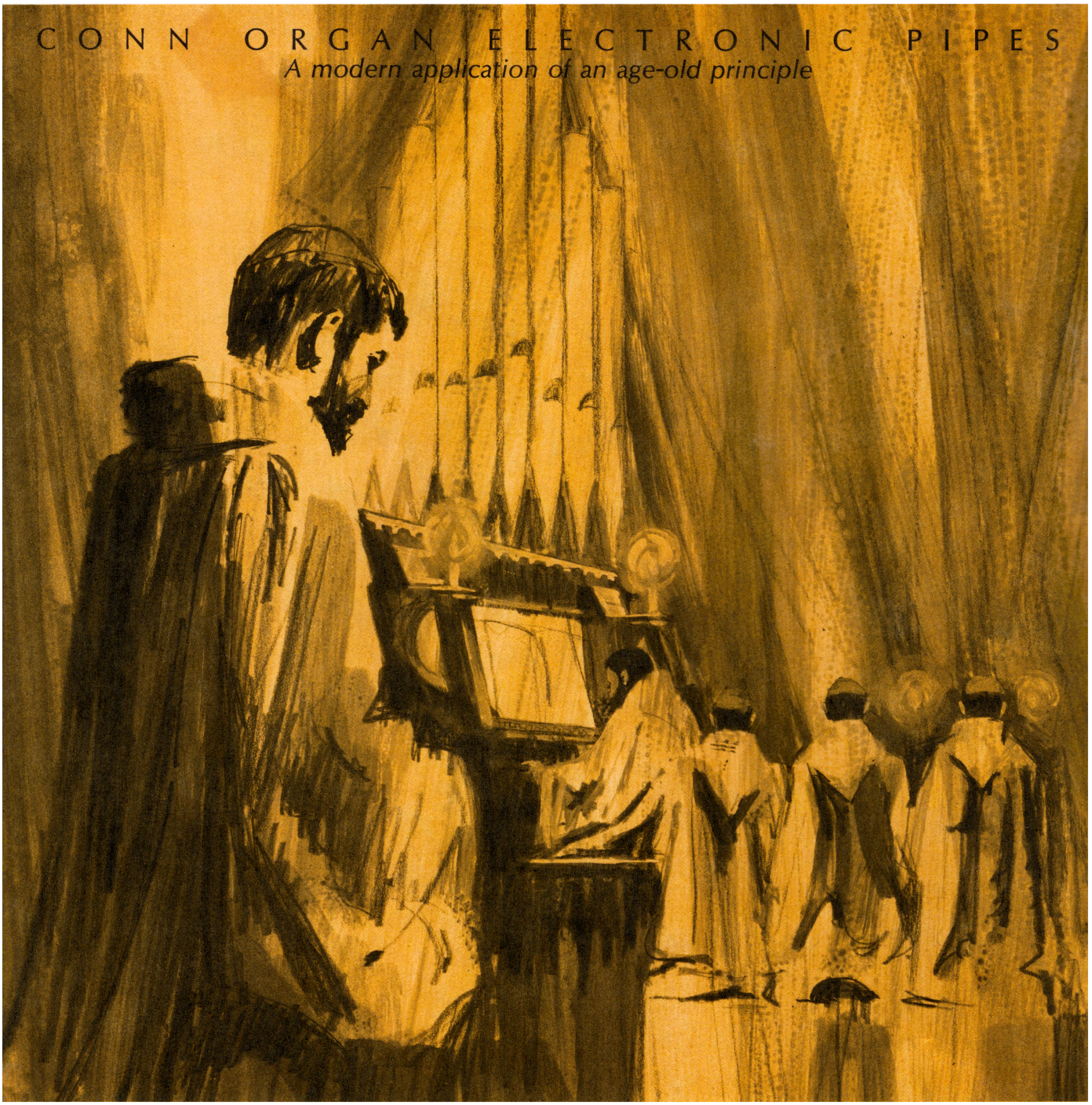

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CONN ORGANS

There is a noticeable difference
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205 Clarence Street, Sydney
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Phone 297222
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The traditional pipe organ had its beginnings at the dawn of history, and its use in churches has been traced back as far as the eighth century. Little wonder, then, that upon entering a strange church, one instinctively looks for the array of pipes that, for centuries, has been characteristic of places of worship. ☐ Today, however, many congregations find the cost of a pipe organ beyond their means and thus have been deprived, not only of a classic ecclesiastical feature, but of the highly desirable property of pipes to disperse massive sound uniformly throughout a large area. It was to make these advantages available at moderate cost that Conn Electronic Pipes were developed. ☐ Similar . . . yet dissimilar. This exclusive Conn achievement meets both of the qualifications mentioned above. Handsome in appearance, a variety of pipe configurations is available, permitting massed arrangements when used with large, multi-divisional organs or easily placed on walls, ledges or niches when used with an instrument of lesser capacity. An assortment of typical arrangements is illustrated on the following pages.

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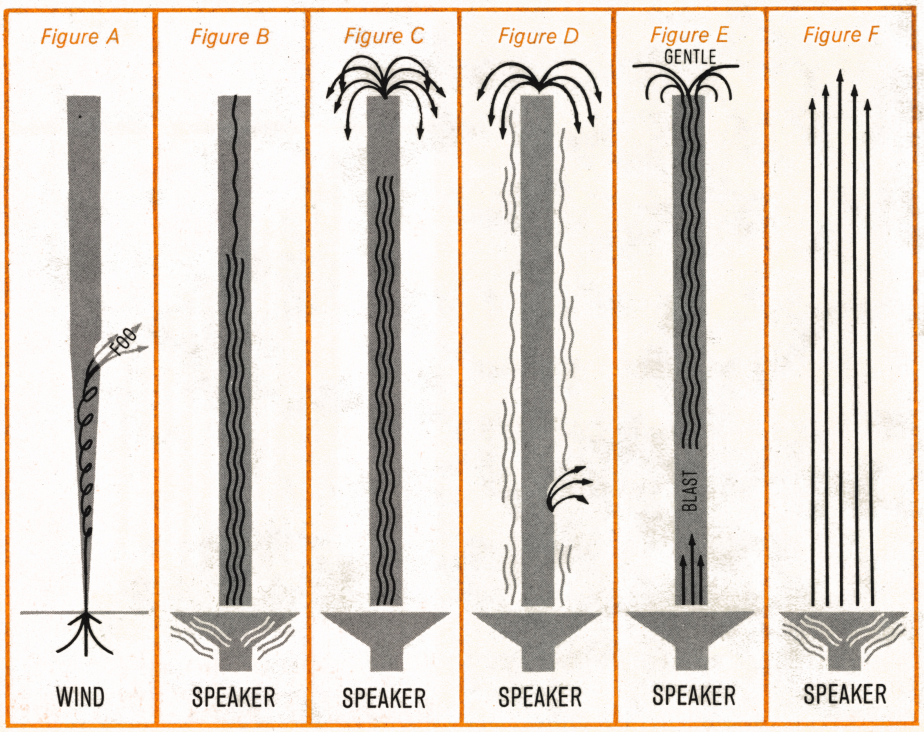
While the dispersal of sound by Electronic Pipes is similar to that of wind-blown pipes, the production of tone is accomplished in an entirely different manner. In both types, the air within the pipe must be activated before sound can be emitted. However, wind-blown pipes are, in effect, whistles requiring a variety of shapes and material to produce the various tones. As with any kind of whistle, sound is created as the wind-stream passes through the pipe (Fig. A).

Electronic Pipes *project* tone created by the organ's tone generators. The voices or tones are "shaped" by voicing circuits within the organ and are then transmitted through speakers into the air columns of the pipes (Fig. B). The air column and the pipe then transmit and disperse the sound into the surrounding air (Fig. C). The action within the enclosed air column may be compared to that of a hydraulic pump. When excited by a note that vibrates sympathetically within a specific column, the air is alternately compressed and decompressed by the action of the speaker.

Non-directional vs. Directional Tone Projection

Not only do the walls of the pipe tend to vibrate sympathetically, sending the sound in every direction (Fig. D), but the restricted air in the pipe acts as a cushion through which the initial tone must pass, softening the voice (Fig. E). A conventional speaker can only project sound in one direction (Fig. F), and there is no cushioning of the tone. This results in a blasting effect, particularly when the listener is directly in line with the speaker.

Because each of the Electronic Pipes resonates with a particular frequency of the organ, sound enters the air from many adjacent sources, as with the pipe organ. However, there are some differences: unlike traditional pipes, Electronic Pipes require no tuning, and, since the sound is electronically produced and regulated within the organ, shuttered expression chambers, a necessity with traditional pipes, are not needed.



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2 tonal ranges...
5 designs...

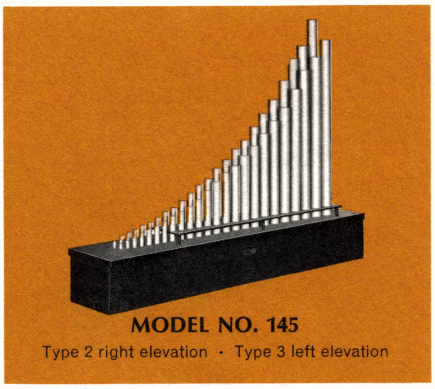
Conn Electronic Pipes are available in two tonal ranges: treble and low. Treble-range pipes (series 145) are assembled in three designs as shown at right. Each set consists of 49 expertly regulated pipes and all are identical in performance. The choice of design is determined by such factors as the area in which the pipes are placed, decorative effect desired, etc.

Low-range pipes (series 146), covering the lower range of the manual tones, are available in two types. Either of these (depending upon the factors mentioned above) is recommended for use in conjunction with a treble-range set to provide wider coverage of the more powerful divisions of the organ.

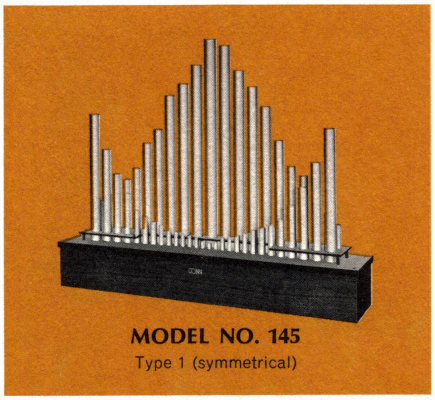
Arrangements without number

As will be seen on subsequent pages of this brochure, Electronic Pipe units lend themselves to an infinite number of arrangements. Normally the arrangement will be determined by the number of units required for a particular organ model. For example, smaller organs, having only two channels of tone, usually require no more than two Electronic Pipe units, plus the organs' in-built speakers. Other instruments, with as many as 12 or more channels, will require a minimum of 10 or 12 units.

If your church is now enjoying a Conn organ or is planning to purchase one soon, your local dealer can suggest the combination of speakers and Pipes that will give you the most satisfying results. You might also wish to consult with a local architect regarding the adaptation of one of the suggested installations on the following pages. This, of course, may also be necessary, especially if there is any question regarding proper or adequate mounting methods required for your building. This can also be extremely helpful from the standpoint of aesthetics.



MODEL NO. 145
Type 2 right elevation · Type 3 left elevation



MODEL NO. 145
Type 1 (symmetrical)



MODEL NO. 146
Type 2 right elevation · Type 3 left elevation

SPECIFICATIONS

LIGHTWEIGHT
require less than
2½ sq. ft. of surface

ALL TYPES
42½" wide, 8¼" deep

NO. 145
Maximum height, 34"; weight, 18 lbs.

NO. 146
Maximum height, 63½"; weight, 40 lbs.

FINISH
Base finished in walnut.
Pipes finished in
gold or silver color

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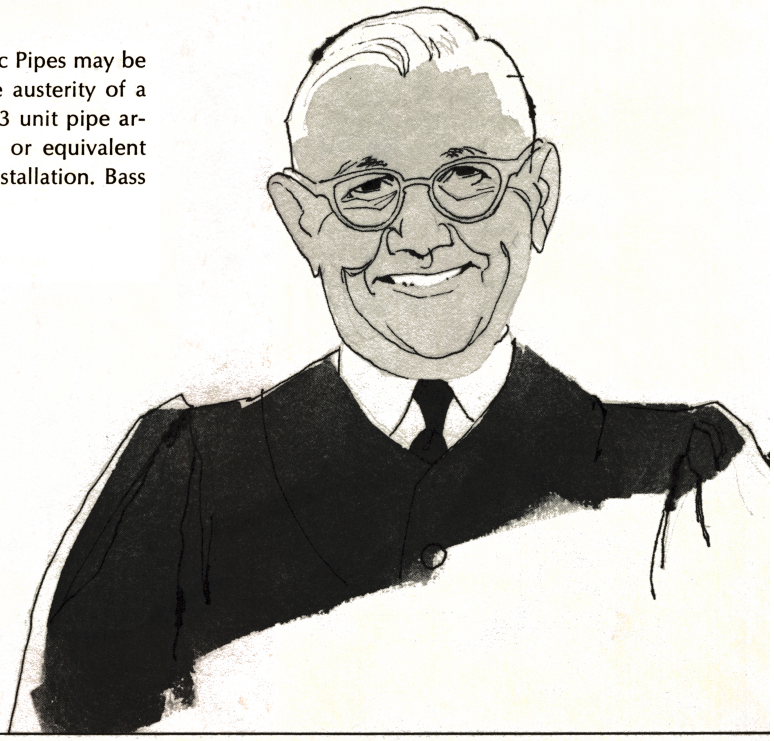
Decorative as well as functional, Conn Electronic Pipes may be suspended in front of a bare wall to relieve the austerity of a large area unbroken by doors or windows. This 3 unit pipe arrangement will accommodate a Conn Serenade or equivalent model. It also represents one part of a larger installation. Bass speakers are installed in cabinet at lower right.

This group consists of three units:
One no. 145 type 2; one no. 145 type 3; one no. 146 type 2.



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THE 632 BY CONN



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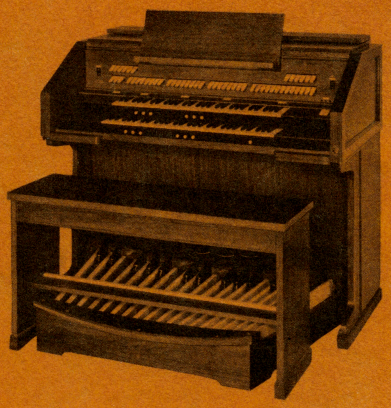
A wood framework surrounding the pipes can also serve as a reredos, as suggested here. Pipes are free-standing, supported by the wood construction which also serves as housing for bass speakers. While more elaborate and traditional in design this arrangement, also for a Classic model, uses the same number of pipe units as shown at left. The only difference being a substitution of types. Note the large pipes on either side which are used for decorative purposes only.

This group consists of six units:
Two no. 145 type 1; one no. 145 type 2; one no. 145 type 3; one no. 146 type 2; one no. 146 type 3.



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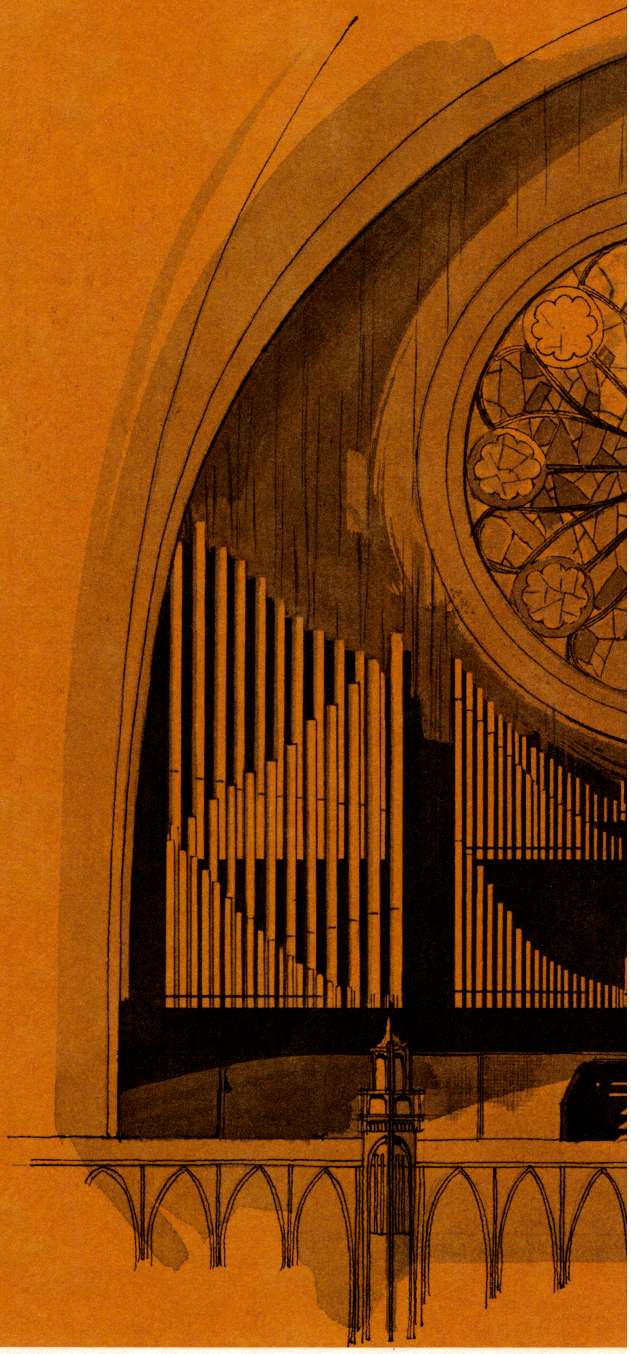
Every church structure is an "original"

Even though the facades of two churches may bear a resemblance to each other, it is a safe assumption that the most casual eye will detect marked differences in the interior. Foremost among the variables are dimensions, of course, as well as placement of furnishings within the chancel and sanctuary to meet the needs of specific denominational worship services. Others include architectural style, presence or absence of a balcony, and many more.

The drawings immediately preceding and following this page have been prepared to illustrate how Conn Electronic Pipes can be installed to conform with typical architectural features. It is hoped that these ideas will serve to stimulate the imagination and suggest adaptations that will meet the specialized requisites of your building—both structural and aesthetic.

Where space permits, and the organ, such as the Conn Custom 3-Manual, is of sufficient capacity, as many as twelve or more ranks of Electronic Pipes can be massed in striking arrangements suggestive of huge pipe organ installations.

This group consists of fourteen units:
Two no. 145 type 1; four no. 145 type 2; four no. 145 type 3; two no. 146 type 2; two no. 146 type 3.



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THE CUSTOM 3-MANUAL BY CONN



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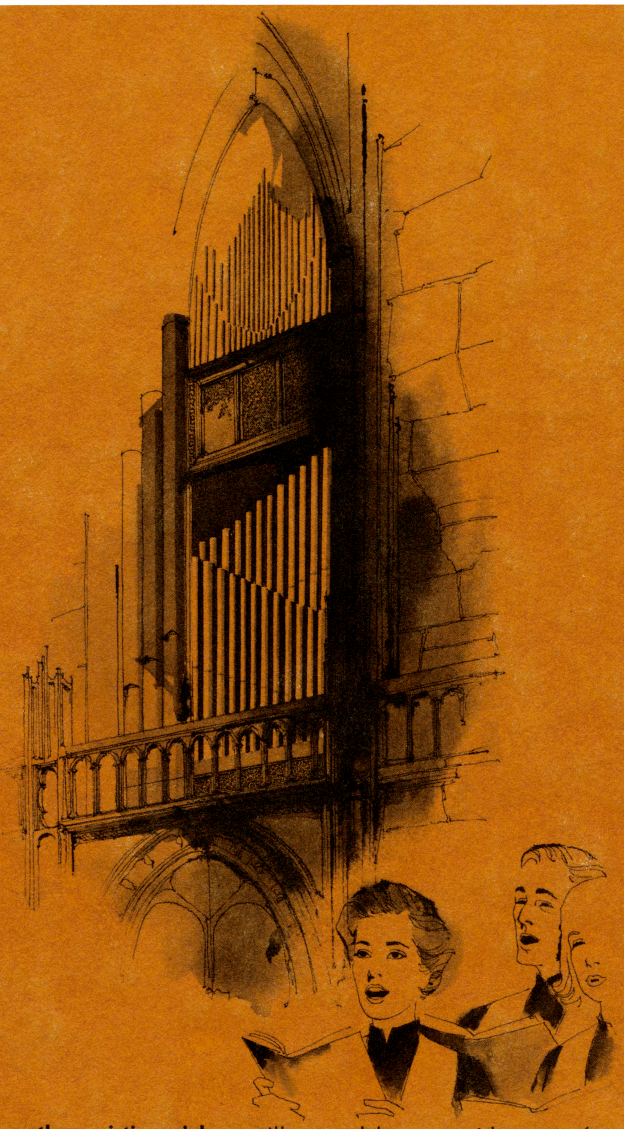

A window or other existing niche as illustrated here provides a perfect setting for Conn Electronic Pipes. This arrangement fills the requirements for a three channel instrument, such as the Conn Artist. For larger models requiring additional units this identical arrangement could be duplicated in a matching frame or open cabinet on the opposite side of the church. The large pipes on each side are used for decorative purposes only.

This group consists of four units:
Two no. 145 type 1; one no. 146 type 2; one no. 146 type 3

THE ARTIST BY CONN



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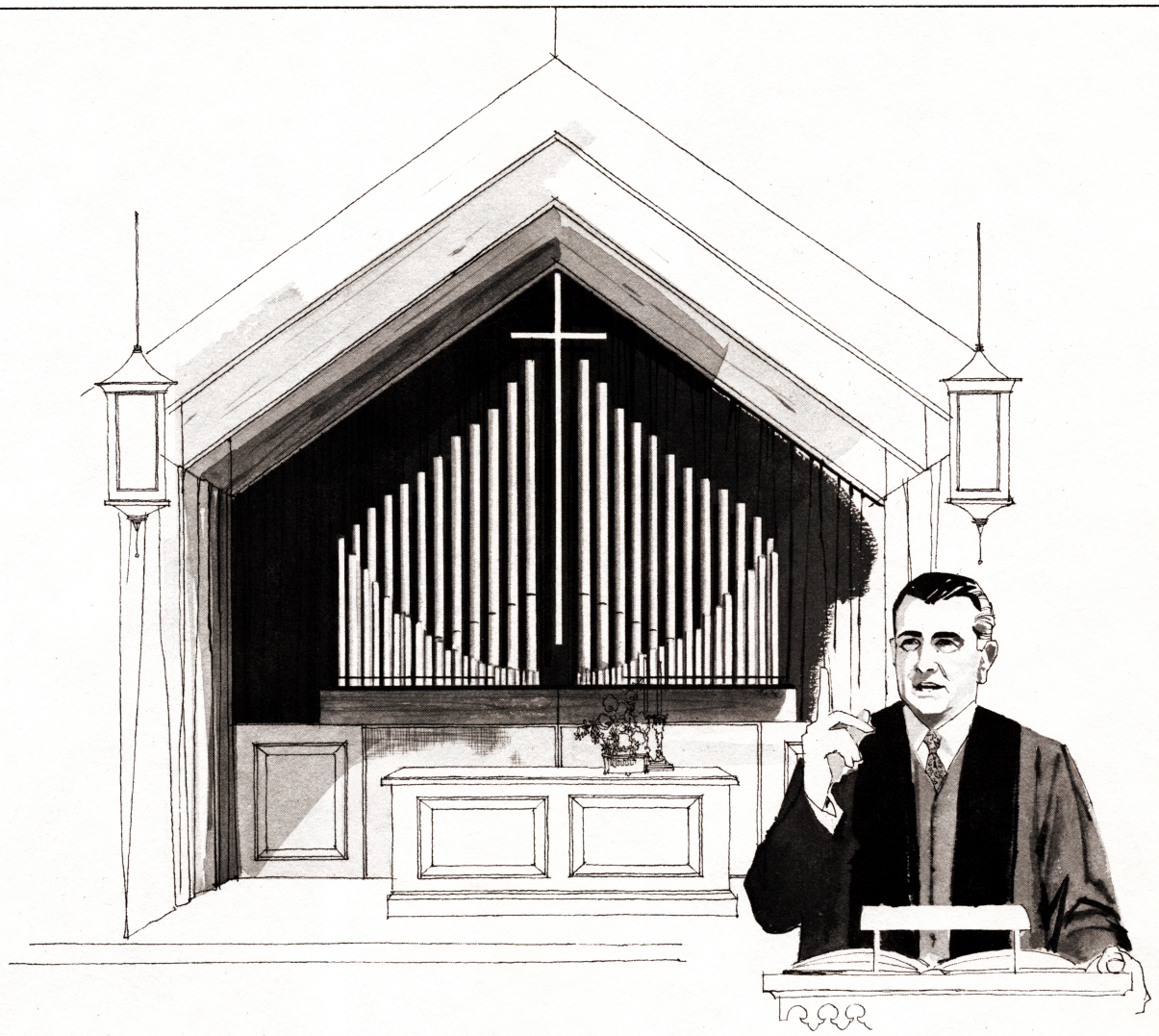

Symmetrical placement of multiple ranks of pipes. The uncluttered appearance and utter simplicity of this grouping suggests wide usage in many situations requiring multiple ranks of pipes. The installation shown here can also be used with the 3-channel Conn Artist or an elaborate installation for a smaller model.

This group consists of four units:
One no. 145 type 2; one no. 145 type 3; one no. 146 type 2; one no. 146 type 3.

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In a chapel, church or other relatively small area, Electronic Pipes may be placed in a frame or open free-standing cabinet which can be simple in design or styled to conform with other woodwork in the church. No special construction necessary. This arrangement is ideal for the 2-channel Conn Rhapsody or Serenade.

This group consists of two units:
One no. 145 type 2; one no. 146 type 3.

THE RHAPSODY BY CONN



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The Theatrette by Conn (above) is shown with one no. 145 type 1 Electronic Pipe in an attractive, "make-believe" miniature stage setting, complete with side drapes and valance.

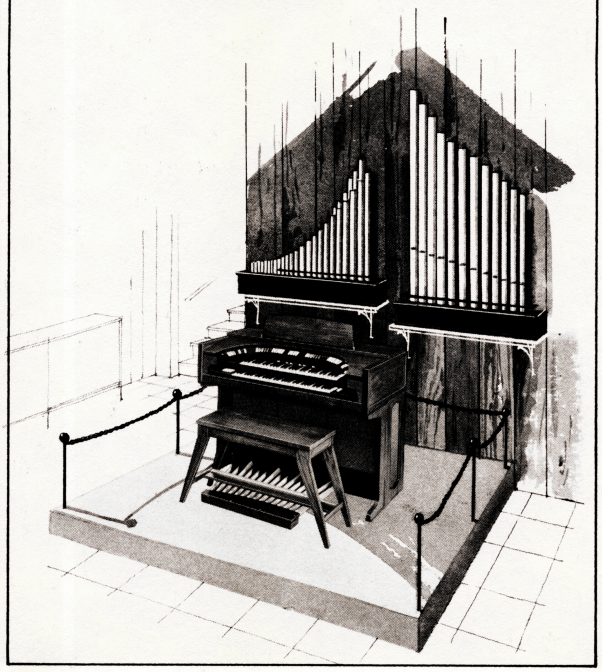
Sacred music . . . and secular

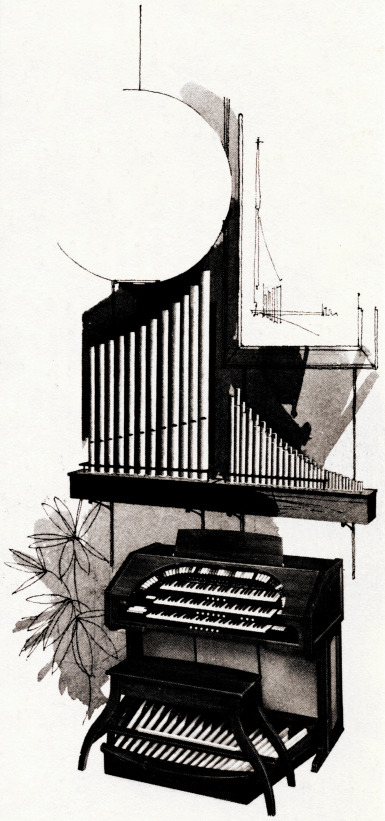
While the suggestions on the foregoing pages apply primarily to churches, many of the ideas pictured can be adapted for use in public auditoriums and other large enclosed areas where the public gathers. In many such locations the decibel-shattering sound level of organ music emerging from conventional speakers can be more distressing than entertaining.

The sound-dispersing qualities of Conn Organ Electronic Pipes overcomes this objection admirably but even more important, the "cushioning" effect of the pipes lend a new and highly pleasing dimension to the tones of the organ.

In homes, too

The adaptability of Electronic Pipes to any size organ, any area, presents unusual possibilities for home use. The light-weight, space-saving units can be attached to a wall or placed on a ledge adjacent to the organ or elsewhere in the room. Several suggestions are shown on this page. Additional ideas for home installations can be taken from some of the illustrations shown on the preceding pages. Wherever the pipes are located, the absence of blast and the gentle diffusion of sound will further enhance the pleasure of home organ music.





The Theatre 642 (left) and **3-Manual Theatre** (above) models by Conn utilize one each model no. 145 and 146 Electronic Pipe. Only variation is that different types were selected to complement each arrangement. Both are shown mounted flat against the wall on easy-to-install metal shelf brackets.

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To help you plan the placement of Electronic Pipes



As mentioned earlier, your Conn Organ dealer can advise you regarding the number of units your Conn organ can handle. Given this information, you will undoubtedly want to devote considerable study to the location of the pipes in relation to existing architectural features, types of units desired and other pertinent factors.

To help you visualize your installation, this brochure contains several sets of Electronic Pipe templates in the five available types. The templates are presented in three scales: 1/8", 1/4", and 1/2" to the foot. As the 1/4" to a foot scale is by far the most popular most of the templates are of this size. One sample of each style is shown in the 1/8" and 1/2" scale. If you require this size templates we suggest you use the samples provided as your guide to cut additional templates from heavy construction paper.

"But we have no blueprints!"

For use when blueprints are not available, or to assist you in deciding whether new construction is desirable, page 19 is designed as graph paper with each quarter-inch square representing one foot. The wall area being considered can be roughly sketched on the paper (to scale), and the 1/4" = 1 foot templates used as suggested above. Of course, in large installations or when extensive structural alterations are desired, you will undoubtedly consult with a local contractor or architect.

Whether you use blueprints or make your own sketch, use of the templates will greatly simplify your planning . . . but remember this all-important point: *be sure to use templates of the proper scale!*

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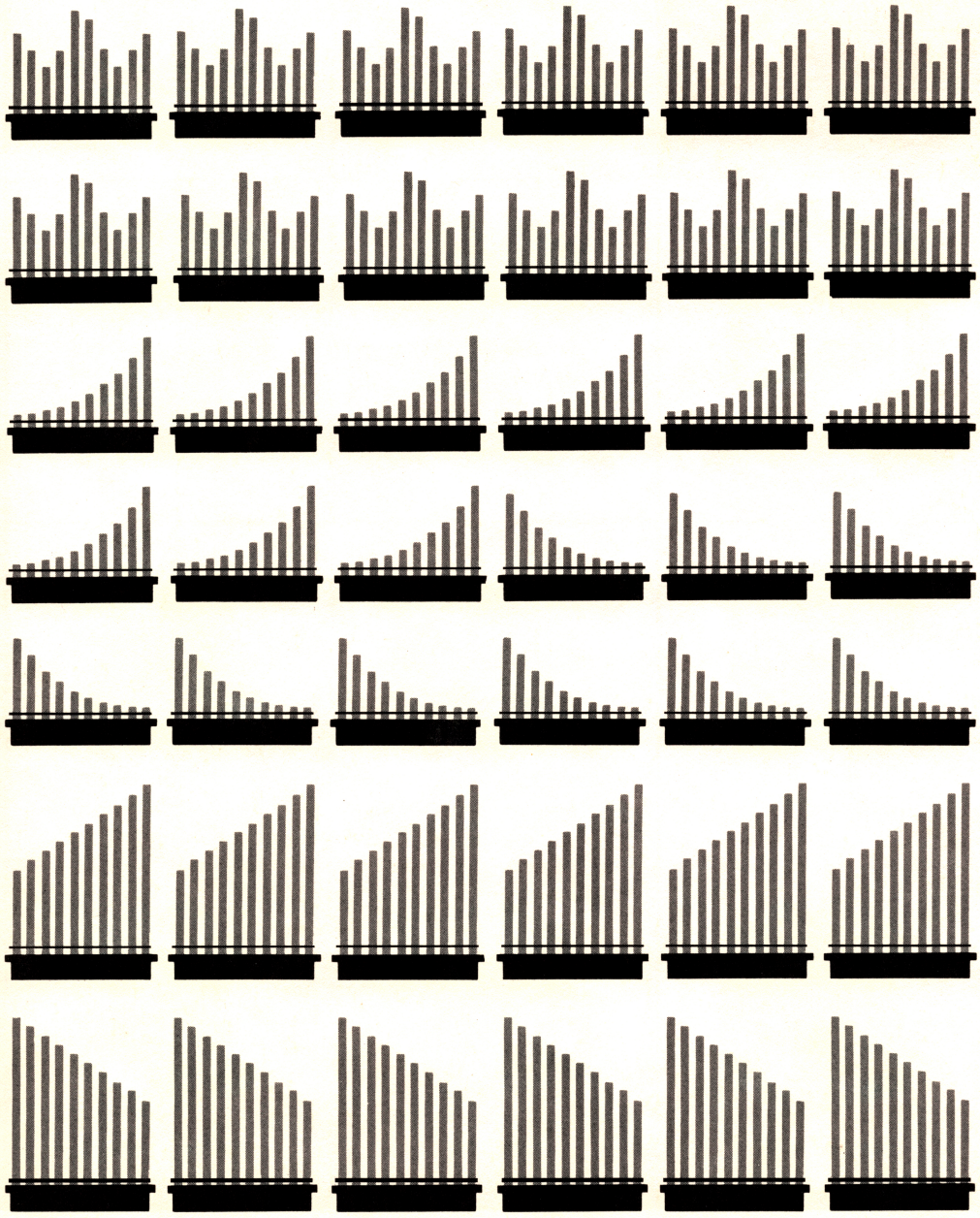
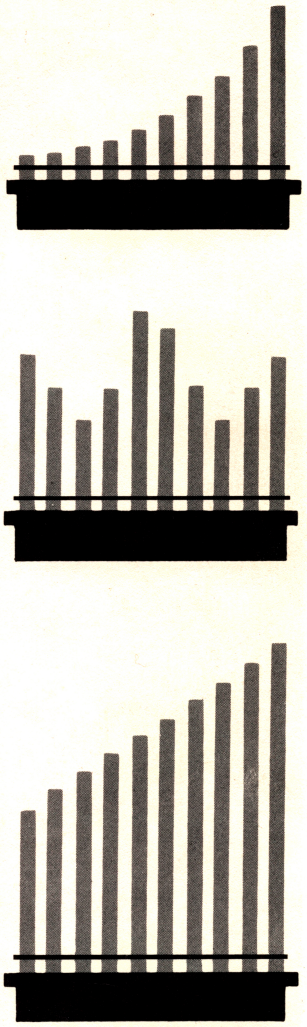
To aid you in planning your church Electronic Pipe Installation

USE THE TEMPLATE CUTOUTS ON THE GRAPH PAPER

SCALE: ¼″ = 1 FOOT



SCALE: ½″ = 1 FOOT



SCALE: ⅛″ = 1 FOOT



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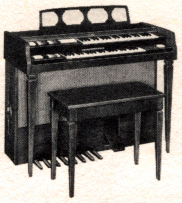
There's a
CONN ORGAN
and
ELECTRONIC PIPE
for every need!
. . . for every pocketbook!



CAPRICE 432
Traditional, Italian Provincial
DELUXE CAPRICE 432
Traditional, Italian Provincial, French Provincial, Early American



MINUET 460
Traditional, Italian Provincial
DELUXE MINUET 460
Traditional, French Provincial, Early American, Italian Provincial, Mediterranean



MODEL 461



MINUET 543
Traditional, Italian Provincial, Early American, French Provincial, Mediterranean



THEATRETTE 551



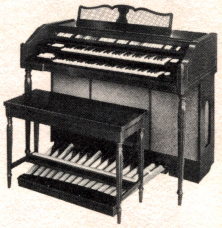
RHAPSODY 628



DELUXE RHAPSODY 628



MODEL 632



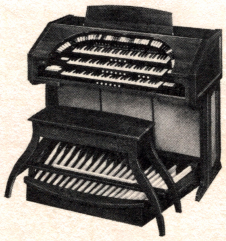
SERENADE 633
Italian Provincial, French Provincial Early American, Mediterranean, Traditional



THEATRE 642

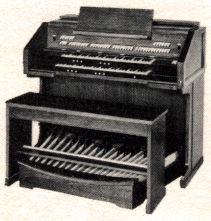


ARTIST 720



3-MANUAL THEATRE

652



CLASSIC 825



CUSTOM 3-MANUAL

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Years of experience are yours for the asking

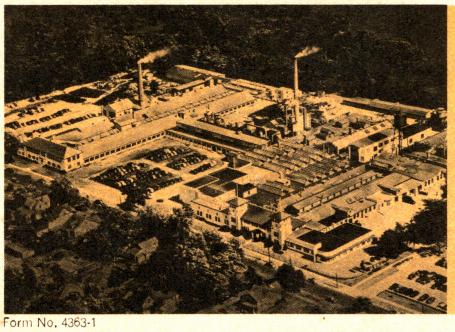
Your Conn Organ Dealer is a reputable business man to whom music is both vocation and avocation. Hence, his dual interest in this field admirably qualifies him to provide practical advice and counsel in the selection and installation of a Conn Organ and/or the Conn Electronic Pipes which best meets your requirements and resources.

At your request, the dealer from whom you purchase your Conn equipment will arrange for an on-the-ground survey of your building or auditorium by a factory technician who will make recommendations to insure a quality of performance and tone beyond your most optimistic expectation. There is no charge for this service.

VISIT YOUR CONN ORGAN DEALER SOON!

CONN ORGAN CORPORATION / ELKHART, INDIANA 46514

Made by C. G. Conn Ltd.,
world's largest manufacturer of band and orchestral instruments . . . since 1875

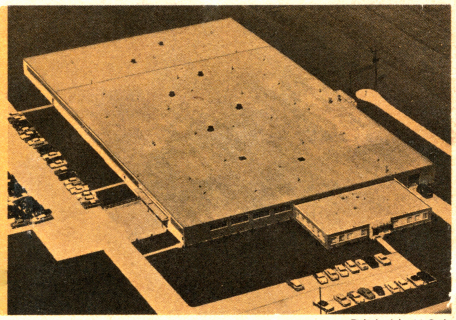


CONN ORGANS

. . . where quality has always been a tradition

C. G. Conn, Ltd., world's largest manufacturer of musical instruments, has specialized in musical tone since 1875. In 1928 Conn established the first full-time band instrument research laboratory and in the early '30's, began scientific investigation into the then little-known relation of musical tones and electronics.

From this proud heritage has stemmed the superb tone and unsurpassed quality that characterize every organ bearing the CONN name.



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