

Questions and Answers

The staff of THEATRE ORGAN will endeavor to answer through its columns questions pertaining to theatre organs, their use, or their installations. These are referred to various experts and here are their opinions.

Q. On my recently installed Wurlitzer I have one note that ciphers when any three of the other keys are held down in a chord, together with the offending note which is B. As long as I keep any three notes depressed at one time, B will continue to play even though the key is released. The only way to release the cipher is to hold less than three notes. What is the cause and cure for this?

A. This situation is apparently caused by residual magnetism in the poles of the armature in the relay for the B note. There is not enough magnetism present to cause the note to cipher when played alone, but when at least three other notes are held, there is enough ripple in the D.C. current in the key circuits to cause a slight A.C. inductance in the console cable. This is picked up in some of the energized circuits, but gives no trouble except where the magnet is slightly magnetized. It could happen in other magnets when four, or five, or even two notes are energized at the same time, depending on the amount of residual magnetism present in any given magnet. It is annoying, but easy to cure. Remove the armature (the round disc) from the offending magnet, and glue a thickness of newspaper on TOP of the armature. If this does not cure it, use two thicknesses, and if this does not do the trick, install a replacement magnet.

Q. How large should the generator be on my six rank theatre organ?

A. The generators usually supplied with this size organ are 10 volt, 12 amp. D.C. at 900 rpm. This usually requires a speed reduction of slightly less than one half of the standard blower speed of 1725 rpm. If a purchase is contemplated, a D.C. organ current rectifier should be considered, the 20 amp. model will suit your needs, for any make organ.

Q. What size wire should be used between the generator and the organ?

A. Wire too small can cause very annoying malfunctions of the key circuits. There are two factors involved, i.e., the size of the organ (and its current requirements) and the length of the wire required. Ordinarily, a size #10 conductor will be ample, if not oversize, for a theatre organ up to three manuals and 16 to 17 ranks, with a run of not over 30 feet. I would recommend consulting your local motor shop for any unusual application.

Q. What is the time lapsed from key contact to valve opening in a unit organ?

A. This is a general question which is difficult to answer accurately. However, actual tests have shown that in organs with pressures of 4 to 5 inches, the time lapse between the key being depressed and the valve on the chest being opened varies only between 1/40 and 1/60 of a second. In a unit organ, where the pressures run from 8" to 15" generally, and up to 25" on occasion, the time lapse would be even less, and probably as little as 1/100 of a second. The "slowness" noted in a theatre organ by a person used to the almost instantaneous speech of an electronic instrument is due more to two other factors, the delay in the speech of the pipe, and the distance between the console and the pipe chambers. In either event, the speech of a theatre organ is not slow and ponderous as many uninformed persons might think!

Q. What is a Static Regulator?

A. A Static Regulator is a device installed in the blower air line, in the blower room usually, which maintains a steady pressure in the static air lines. These are the air lines which feed air to reservoirs, winkers, etc. Its primary function, aside from pressure regulation, is to eliminate air noise from the blower in the pipe chamber. Every home-installed theatre organ should have one for maximum quietness. They can be purchased or it is possible to make one from a reservoir by replacing the valves with a gate valve.

Q. How do I determine the correct size of an air line that supplies several bass-offset chests?

A. Bass offset chests, usually have a hole of the correct size already drilled in one end. (If there is more than one, find the hole with the smooth bore, as it usually is the original hole, the other probably having been bored by owners subsequent to the original). After measuring the diameter of each of the holes in the chests to be hooked up to a common air line, compute the area of each hole and add the results for a total area figure. (Area can be computed roughly by multiplying the hole diameter by itself, and then by multiplying the answer by .75). The area of the wind line to the offsets should equal 75% of the total area of all of the offset holes.

Example:

Three chests to be supplied, two with 3" holes and one with a 4" hole. $3 \times 3 = 9$. $9 \times .75 = 6.75$ sq. in. $4 \times 4 = 16$. $16 \times .75 = 12.00$ sq. in.

For the three chests, add 6.75 plus 6.75 plus 12.00 = 25.50 sq. in. Multiply $25.50 \times 75\% = 19.12$ sq. in. for the size of the supply line. Reversing the process, 19.12 sq. in. is 75% of 25.48, and this would be the area, approx., of a pipe 5 inches in diameter, the correct size of the air line in question.

Organist, A-1, reliable, account house going into vaudeville. Union; library; congenial; pictures only. Good house and organ wanted. Paul Jones, Lee's Summit, Mo.

Pipe Organ for sale, "Jardine." Two manual auditorium. Thirty stops. Can be seen any day, 9-5. James H. Johnson, 161 W. 53rd St., New York. Tel. Circle 9082.

Lady concert organist for high class theatre. Several years' engagements. Particularly adapted to cue pictures accurately and altruistically. Music pleases audiences and draws patrons. Large repertoire. Excellent condition of any make organ imperative. Minimum salary: \$75 per six day week. South preferred. A.F.M. Now on vacation . . .

Wanted: a piano player for relief on vaudeville and pictures. Double on organ. Ithaca Theatre, Ithaca, N.Y.

Only theatre in Iowa town of 1144, 2 machines, Wurlitzer Orchestra, 300 seats, 6 nights, \$3,000. W. D. Martin, Neilsville, Wisconsin.

Perusing Billboard and sticking to my goal of theatre organ material was sometimes difficult. A situation existed which

many of us often have experienced while using the dictionary or encyclopedia—one's attention is diverted by fascinating items and we suddenly find ourselves out on some delightful tangent. One such attraction was the shapely burlesque queens of the day whose photographs appeared from time to time. Other diverting items were the "for sale" ads featuring merchandise for carnival folks. These included baskets made from armadillo shells, tassled and braided lampshades of the 20's, kewpie dolls, five cent root beer, Star automobiles, and an Alaskan malemute. Almost every issue had at least one ad by a medico who offered to straighten cross eyes. The ads were illustrated and I became somewhat strabismused myself after looking at a few of them.

The research which resulted in the information here is, of course, a sampling. A more complete examination of other back issues, not only of *Billboard*, but of

Variety as well, will no doubt reveal many of the grand and talented artists and noble instruments of the glorious theatre organ era.

There is a practical aspect of research of this type for those of us in the ATOE, I think. One is the possible rediscovery of the organists of 35 years ago. T.O. artists who were young at that time are not old now—perhaps in their sixties. They may be living in the same geographical area now as they did in the 20's. An interesting project for an ATOEer would be to locate one of these folks and become acquainted. Secondly, the various ads and news items can give a clue as to where there might be a dust-covered Wurlitzer, Marr and Colton, or Robert Morton, waiting, like the bottled genie in the Arabian Nights tale, to be released to bring joy to some organ enthusiast's heart.