

Help Others to Hearing . . .

Correction of a hearing loss by means of an aid is as normal as correction of visual defects by glasses. The prejudice against hearing aids is rapidly disappearing. Nevertheless, there are still many who need hearing aids but who refuse, for reasons of pride, to admit the need. If you know such persons, explain to them how the use of an aid is the natural procedure, and that the matter of pride just isn't a factor. No one knows better than you, the difference which a hearing aid makes in the life of a deafened person, and its importance to the individual!


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MICROPHONE

Lifetime

HEARING AID



*Instruction
and Information Book*

Dear Friend:

Your new Microtone *Lifetime* hearing aid is the finest instrument yet produced for the hard-of-hearing. As you use it, you will come to realize the important advantages of its Sealed Power construction and the other features provided for better hearing.

Please be assured that the workmanship in this aid is the finest. Microtone craftsmen are the best in the industry and skilled hands have built this instrument especially for *you*. All of us at Microtone are striving to bring you the best in hearing instruments, and we have constructed this one to provide you with years of satisfaction.

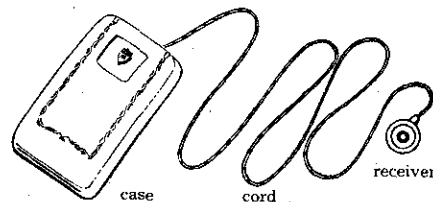
Yet, even so sturdy and well built an aid as your new Microtone needs intelligent care. So, whether you have used a hearing aid before or not, please read this instruction booklet carefully and follow the instructions which are contained herein. A few minutes reading time will be rewarded with greater utility from the Microtone.

Microtone hearing aids are made in Minneapolis, the center of the hearing aid industry. Should you happen to visit this city, I sincerely hope that you will call on us and learn how your Microtone is made, and become acquainted with us.

Cordially,
S. C. RYAN, president

OPERATING THE INSTRUMENT

The complete Microtone *Lifetime* hearing aid consists of a case containing the amplifier and batteries, a receiver cord leading from the case



to the ear, and the receiver, to which the cord is connected. The proper connections of the cord are shown in *Figure 1*.

The transmitter case is opened by holding the front half of the case in the left hand and pulling back on the rear half of the case as shown in *Figure 2*. The case is hinged at the bottom and the case opens a full 180°. The case is held together by simple friction catches, and slight pressure will open it without difficulty. If, at any time, the case fails to snap closed tightly, your authorized Microtone dealer will be glad to make the necessary adjustments.

Two controls at the top of the case permit simplified operation

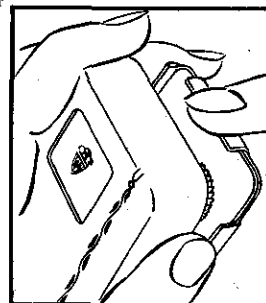


FIGURE 2

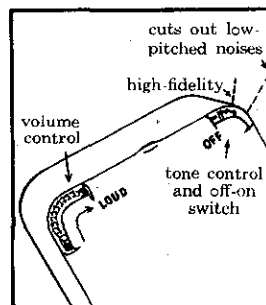


FIGURE 3

of the Microtone. The wheel controls only the volume of sound reaching your ear. This may be set to a comfortable level, and need be adjusted only occasionally. The little lever is a combined on-off and tone control. In its "up" position, the aid is shut off. At the middle setting, the instrument is "on" and the tone control set for high fidelity amplification. That is, both high and low tones are amplified approximately equally. In the third, or "down"

position the instrument is on, low tones are suppressed and higher tones accentuated.

Most persons prefer the tone quality of the high fidelity setting. However, cutting off the lower tones may provide greater intelligibility of speech and lower noise level in some locations. Certain types of hearing losses require greater power in the high frequency area. Your Microtone consultant will suggest the preferable setting of this control for your needs, but beyond this you should experiment to determine which position gives you the best understanding of speech under various conditions. The control may be switched back and forth at your pleasure.

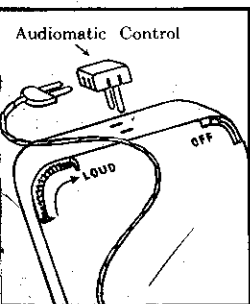


FIGURE 4

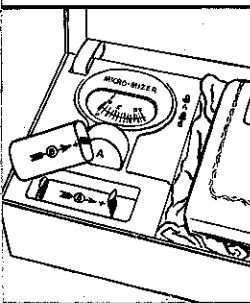


FIGURE 5

Audiomatic Control was developed by Microtone for greater hearing comfort. It may be included with your instrument, or it may be added free, within the first year. The purpose of Audiomatic Control is to limit output of the instrument to a comfortable level. Even though the volume control of a conventional hearing aid is set so that normal sounds are heard comfortably, a sudden loud noise can cause full output from the amplifier. Children shouting, the passing of streetcars, or dishes rattling are sounds that may cause discomfort or actual pain to your ear. This discomfort is prevented by Audiomatic Control. The Control itself consists of a small disc which is plugged between the receiver cord and the case. Different degrees of control are available.

Those who have not previously used a hearing aid will find Audiomatic Control a great help in learning to use an instrument. It is also valuable for those who work in noisy locations such as shops and offices. Consult your Microtone dealer regarding this extra feature.

THE MICRO-MIZER

If you have been accustomed to operating a one-piece hearing aid before, you will be delightfully surprised with the extremely low operating cost of the Microtone *Lifetime*. Although the aid itself is remarkably efficient, much of the economy is due to the miraculous

Micro-mizer, which restores ordinary batteries to full strength time after time.

The Microtone *Lifetime* uses an RMB-4 mercury "A" cell and a 412 22 volt "B" battery. Be sure to place the batteries into the case properly. (See Figure 5). The "A" battery is inserted so that the Mallory trade mark may be read when the battery is in place. The arrow on the "B" battery must point the same direction as the arrow inside the case, underneath the battery. **If either battery is incorrectly inserted, the instrument will not operate.**

Be sure to remove batteries each night, and any time when the instrument is not in use for several hours. This will prevent damage which might occur due to leaking batteries. Such damage is not covered by guarantee.

At night, when you remove the batteries, place them in the Micro-mizer. The Micro-mizer must be plugged into a regular household lighting outlet. (110 volts, 60 cycle A. C. For other current, consult the Microtone dealer.) When the batteries are placed in the proper slots in the Micro-mizer and the cover closed, restoration of the batteries will take place overnight. **Note: the batteries will not be restored if the case cover of the Micro-**

mizer is open. An automatic switch is operated by the cover for your protection. You may have to experiment to get the greatest battery economy with this new Microtone development. If batteries are used with the aid for 15 hours a day, then placed in the Micro-mizer for 9 hours each night, you can expect 200 to 250 hours of service from the "A" cell and 800 or more hours from the "B" battery! If your hearing loss is high, you will not be able to use the batteries for so many hours, but the proportion of saving in battery cost over other instruments will remain the same.

You may obtain longer battery life by using two sets of batteries, charging one for 24 hours while the second set is in use, then using the second set while the first is being restored.

The Micro-mizer contains a meter which allows you to check battery strength regularly. **"A" cells need special treatment or must be discarded when the voltage at the end of the day is below .9 volt.** The average user will have trouble hearing well when "B" voltage **is below 16 volts at the end of the day.** However, do not discard batteries immediately when low voltage is encountered. Keep them in the Micro-mizer for a 24 hour period. In our experience many batteries, apparently exhausted, have been restored to satisfactory

service for many more hours by a long period of charging.

If economy is an absolute essential, batteries may be used many more hours after they fail to give a full day's service. Such cells may perform satisfactorily for half a day at a time.

You will find considerable variation in the performance of batteries. Some may fail to give greatly increased service over ordinary use while others may be restored to satisfactory service for many days after the others have failed. This variation is normal, and do not be disappointed if you should encounter one or two of these in your first experience with the Micro-mizer.

In your home you should keep a supply of both "A" and "B" batteries. And it is wise to carry a set of new batteries in your pocket or handbag at all times. Otherwise sudden battery failure may deprive you of use of the aid.

RECEIVER CORDS

Two receiver cords are furnished with the Microtone *Lifetime*. One is a very light cord for dress wear. The other is a sturdier cord for everyday use. Receiver cords are affected by perspiration. If you live in a warm climate or normally perspire a good deal, it is wise to ob-

tain another cord from your Microtone dealer and alternate use of the cords. One should dry thoroughly while the other is in service.

Receiver cords are subject to so many conditions beyond the manufacturer's control that they cannot be guaranteed. Treat them well, and they will last. Don't jerk or pull on the cords, and do not disconnect cord from receiver any oftener than is necessary.

WEARING THE INSTRUMENT

With earlier, large hearing aids it was customary for the user to wear the aid in a "hearing aid garment" . . . a fabric pouch with strap arrangement which kept the instrument properly located and comfortable to wear. Men will not likely require such a garment for the miniature Microtone *Lifetime*. The instrument may be safely and comfortably carried in the vest or shirt pocket. The receiver cord is led up under the shirt and collar to the ear. Men who are active in work or sports may find it well to have buttonholes made on the inside of the shirt pocket, through which the clothing clip may be slipped to anchor the aid firmly.

In general, women fasten the instrument to lingerie straps, or to the brassiere. For this pur-

pose an oiled silk or flannel case with pinning tabs is convenient. Such cases may be procured from the Microtone dealer. Most women prefer to have two cases, so that one may be washed while the other is worn.

For children and for adults who may have special problems, the Microtone dealer can suggest suitable garment arrangements. For all cases, the aid should be placed so that there is a minimum movement of clothing over the instrument. While the Microtone has been designed for minimum clothing noise, proper location will help to increase your satisfaction with the aid. If at all possible, wear the aid on the *opposite side* from the earpiece. This will help to reduce the possibility of squealing (which is due to sound from the receiver leaking back to the microphone).

Neat, secure clothing clips may be placed on either the front or rear of the *Lifetime* case. Your Microtone dealer can affix these for you, or change the location at any time.

GENERAL CARE OF THE AID

Naturally you are not going to tamper with the instrument. To do so voids the guarantee. Although the tubes and certain other parts are removable, excessive removal and replacement

will damage the contacts and cause unsatisfactory operation.

The microphone is actuated by a crystal . . . the most sensitive, most efficient hearing aid mike made. However, crystals are damaged by high temperatures.

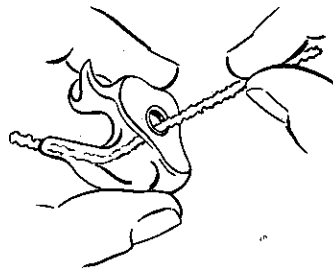


FIGURE 6

Never leave the aid in the hot sun or in a hot location such as the glove compartment of a car in the summer time. The crystal will not be damaged in heat which you can stand as a person, however.

Do *not* use carbon tetrachloride or other cleaners to clean the case or any parts. If the case becomes soiled, it usually can be polished with a soft, dry rag. If the soil is extensive, dampen a cloth slightly in alcohol and clean with this. Do not use water on the instrument. The earmold (but *not* the receiver) may be washed in soapy water, but no other cleaner may be used. Ordinary cotton pipe cleaners are handy for cleaning the channel in the earmold.

IN CASE OF TROUBLE

If the aid does not operate, first make sure that the switch is on, and that the volume control is turned up. Second, check to see that the receiver cord is firmly connected both to the case and the receiver. Third, try another cord. Fourth, check batteries for correct placement, then replace both "A" and "B" batteries with *new* cells. Fifth, check the earmold to see that the passage is clear of dirt or wax. If there still is no sound, take the aid to your Microtone dealer as soon as possible. Nothing can be accomplished by taking the instrument apart yourself. You *cannot* repair it and you may damage it.

LEARNING TO USE YOUR MICROTONE

If you have not previously used a hearing aid, frankly face the fact that it will take you some time to get used to an aid. Not only must you become accustomed to wearing the earpiece and hearing sound, but you must "learn to hear" again. Hearing is dependent upon practice, and especially if you have been "out of practice" — if you have not heard for some time, it will take weeks for you to understand speech as well as you'd like to, even though you hear the sounds.

For the first week or two, wear the aid an hour or two each day, keeping the Volume

level low, or restricting it by means of Automatic Control. Then gradually increase your use of the aid until in 60 days time you use it constantly. Your annoyance with the aid at first is very usual, but will disappear rather quickly. Your tolerance for sound and your ability to understand will improve with the passing of time.

There are a few cases where full understanding of speech cannot be regained with a hearing aid. This trouble is inherent in some types of hearing loss. You may find it advisable to supplement your hearing with instruction in lip reading. The probability is that you will not get better results with other hearing aids. Consult the local chapter of the American Hearing Society (headquarters at Washington, D. C.) for information on lip-reading classes.

If you have been using another hearing aid, it may take a few days for you to become accustomed to the tone quality of your new Microtone. Give the instrument a fair trial, and you will soon find that you like the high fidelity tone quality better than your previous aid.

THREE OR FOUR TUBE MODELS

The above instructions apply both to the three tube and four tube versions of the Microtone

Lifetime hearing aid. These two models are identical in size and appearance, but the amplifiers are different. If you have a three tube Microtone, the four tube push-pull amplifier can be installed in your case at nominal cost, now or in the future.

The push-pull output of the four tube instrument produces considerably greater power output — twice the sound pressure at the ear — and very greatly decreased distortion and an extremely pleasing tone quality. Should your hearing impairment progress to the point where your three tube amplifier is insufficient for your needs, consult your Microtone dealer concerning placing the more powerful amplifier in your instrument.

USING THE TELEPHONE

Some people with hearing loss are able to understand well over the telephone. If you are one of the fortunate, use the telephone normally. Otherwise, turn the telephone so that the receiver is placed over the microphone of the aid and the mouthpiece to your lips, as illustrated.

