

## High Fidelity Equipment and Dampness

*Q. I have just purchased an Altec Lansing 820C speaker for my seashore home. Though I have the house on low heat all the time, dampness is ever present at the shore, and I have been told that dampness will affect the paper cones of the speakers or possibly cause the speakers themselves to rust.*

*I would welcome your best opinion as to whether this dampness would also have some adverse effect upon amplifiers, pre-amplifiers, etc. What means, chemical or otherwise, might be employed to overcome this?* John Sabritt, Philadelphia, Pa.

**A.** You are quite correct in your concern as to what dampness can do to high fidelity equipment. Of course, much depends upon the degree to which the equipment is exposed. Extremely damp, salty air can easily cause cones to go off center, and can corrode many of the parts of your equipment, leading to a breakdown of many of the capacitors and to freezing of the controls.

Fortunately, there are things which can be done to overcome this problem partially. One thing which can be done is to place silica gel in the boxes or cabinets in which the equipment is contained. In addition, you could include in each cabinet to be protected, a device known as a Damp-chaser. This device is used extensively by piano tuners and manufacturers to keep pianos dry and at a constant temperature. These devices are also used by many manufacturers of electronic organs to protect the chassis of these instruments from the ravages of dampness. The Dampchaser is nothing more than a heating element. Its purpose is to raise the temperature of the device being protected two to four degrees above the surrounding temperature; this simple act will reduce condensation. These units are available in several sizes, and I would recommend that you use the largest possible size.

Once the equipment being protected is turned on, its own operating temperature will be sufficient to avoid condensation. Because of this, the Dampchaser need not operate at this time. This can be accomplished quite easily. Simply connect the line-cord of the Dampchaser across the terminals of the switch of your system. When the device is turned on, the Dampchaser is automatically shorted out of the circuit. When the equipment is turned off, current can flow through the device. Since the power consumed is very small compared to the device being protected, most of the voltage will be developed across the Damp-chaser, and almost none across the primary of the power transformer.