THE PATENTED, AUTOMATIC TWO-WAY HUMIDIFICATION SYSTEM ENGINEERED FOR D'ADDARIO BY BOVEDA®

The Humidipak Two-Way Humidification System completely eliminates all the guesswork and anxiety from maintaining your instrument's proper humidity level. Every guitar builder will tell you that maintaining safe Relative Humidity (RH) levels for your valuable instruments is the best way to protect your investment and to maintain optimum playability.

QUICK START

Unless your instrument or hard-shell (wooden) guitar case is in a known overly dry or humid state, follow these six simple steps to start using Humidipak properly:

- 1. Open the outer packaging on your Maintain Humidipak packets.*
- 2. Insert one in each side of the saddle pouch and one in the headstock pouch included with this kit. Be careful never to puncture a Humidipak packet. If a puncture occurs, discard the packet(s).
- 3. If your instrument is a flat top guitar with a normal soundhole, insert the saddle bag over the 3rd and 4th strings and allow the packets to hang inside the body of the guitar. If you are using Humidipak with other instrument types, find a space in your instrument case that will safely accommodate the packets. Never put them in a position where they are under pressure or where strings or tools can puncture the carrier bags or packets themselves.
- 4. Place the headstock pouch under the headstock in your case.
- Keep your instrument in its case with the lid securely fastened. When playing the instrument, store the active Humidipaks in the closed case or a sealed ziplock bag.
- 6. When the packets are hard, they are depleted of moisture and should be discarded and replaced with fresh packets.

TAKING THE MYSTERY OUT OF HUMIDIFICATION

With Humidipak, you will not need to worry about refilling humidifiers or whether your instrument is being over-humidified. Unlike refillable humidifiers, Humidipak provides true "two-way" humidity control by adding or absorbing moisture as needed, maintaining the ideal climate for wooden instruments: 45 to 55%* Relative Humidity. Maintain Humidipak packets have the capacity to provide 26 grams of water vapor per packet to your instrument and case, and are designed to stabilize your instrument's RH at around 50%. At the same time, they have the capacity to absorb more than 15 grams of vapor if your instrument is over-humidified. Using the Humidipak system as instructed will provide your instrument with a perfect, safe and stable environment. Maintaining your instrument's proper RH will prevent string buzzes, warped necks, cracks, and other structural damage that can occur when an instrument is too dry or too humid (outside the recommended range of 45 to 55% RH).

SCIENCE MADE PORTABLE

Humidipak utilizes a combination of a formulated salt, water, and gel solution contained in a leak-proof, vapor-permeable membrane packet. Based on scientific principles, the saturated solution will maintain a constant level of 45 to 55% RH within a sealed environment, like your instrument case, virtually eliminating damaging fluctuations in humidity. The packet's membrane itself ensures purity and allows for quick water vapor transmission. The reverse osmosis membrane acts much like the filtration used in water purification systems by inhibiting the passage of soluble substances (like salt) and by allowing only pure water vapor to pass in and out of the membrane. The membrane also allows for a fast rate of water vapor transmission or absorption as the solution responds to changes in the ambient environment.

SAFE, SIMPLE AND EFFECTIVE INSTRUMENT MAINTENANCE

Keeping an instrument humidified can be a complicated process — Humidipak simplifies that process. Telltale signs that your instrument is in the "danger zone" include cracks in the top, sides, or back; high action or string buzzing; as well as frets sticking out of the side of the fret board, to mention a few. It may take as long as two weeks to properly rehydrate a dry instrument. In many cases, simply rehydrating your instrument will restore most of its previous playability. In some cases, cracks

will close up, the neck will expand and cover protruding frets, and action may improve as well.

NOTE: While Humidipak is designed to be the ultimate humidity maintenance device, it cannot repair permanent damage caused by overly dry or moist conditions. If your instrument has not been humidified properly or is in a known excessively dry condition, it is highly recommended that you properly re-humidify your instrument and its case before using Humidipak as a maintenance system.

D'Addario also offers Restore conditioning Humidipaks which are designed to more quickly rehydrate an overly dry instrument and case. They should not be used regularly. Access to a good hygrometer such as D'Addario's Humidity & Temperature Sensor (PW-HTS) or our Bluetooth-enabled Humiditrak device (PW-HTK-01) and mobile application (humiditrak.com) will always tell you exactly what condition your instrument is in. We highly recommend using such a device to assist you in caring for your instruments.

If your instrument is in an overly dry state, it can take between 20 and 100 grams of water or more to restore a dry instrument — and that's only the guitar. A case that is of wood construction (some modern cases are molded plastic) can hold up to 400 grams of water by itself when fully humidified. You can think of the inside of your guitar case as its own little ecosystem. A wooden case and instrument actually interact to maintain an equilibrium. If one is dryer than the other, it will start to draw moisture from the more humidified source. This is why it is essential that both the guitar and its case are at the proper humidity level. When the instrument's case is humidified, it acts as a buffer between the guitar and the outside environment, and in turn becomes an additional humidity source to a potentially drying instrument.

The Maintain system will do an excellent job of re-humidifying a dry instrument and case; however, these conditions might deplete the packets of their moisture content quickly and could take multiple packet sets for your guitar and case to reach equilibrium. Before relying solely on the standard Maintain Humidipak System, if you believe your instrument is in an overly dry state, safely hydrate a known dry instrument along with its case to the proper humidity level by using the Humidipak Restore System (PW-HPK-03), Conditioning Packets (PW-HPCP-03), or our standard sponge-based humidifiers (GH and GHP), sold separately.

For instructions on how to properly humidify a dry instrument before using the Humidipak System, please visit the Humidipak product page at daddario.com/humidification.

Once your instrument is properly humidified, follow the Quick Start instructions on the first page to enjoy instrument care made simple.

NOTE: At no time should you puncture, tear, or open the packets exposing the inner contents. In case of a puncture or tear, immediately discard the packet(s) and replace.

Under most conditions, Humidipak packets should last between 2 to 4 months. You may notice a shorter life during the more extreme winter months but conversely, you will see extended life span during the milder spring and summer months. As long as you can press the packets with your fingers and feel movement of the contents, the packets are working. Once the packets become solid, discard and replace with fresh packets (PW-HPRP-03).

Be aware that extreme temperatures can damage your instrument faster than overly wet or dry conditions. Temperature changes will also have a direct effect on your instrument's humidity level. It is recommended to maintain an average temperature of 75° Fahrenheit (24° Celsius) where you store your instrument.

*45 to 55% is the typical range of the Humidipak System. Due to extreme climatic conditions and the quality of the instrument case, you may sometimes experience results outside of this range. Also, note that most hygrometers have an accuracy of +/- 5% which can affect your readings. Results from 40 to 60% are generally accepted to be safe for your instrument.

For more information on humidifying your instrument, please visit daddario.com/humidification