

CATALOG

SYSTEMS, PARTS, GUIDELINES

Piano

LIFE SAVER SYSTEM

from
DAMPP-CHASER



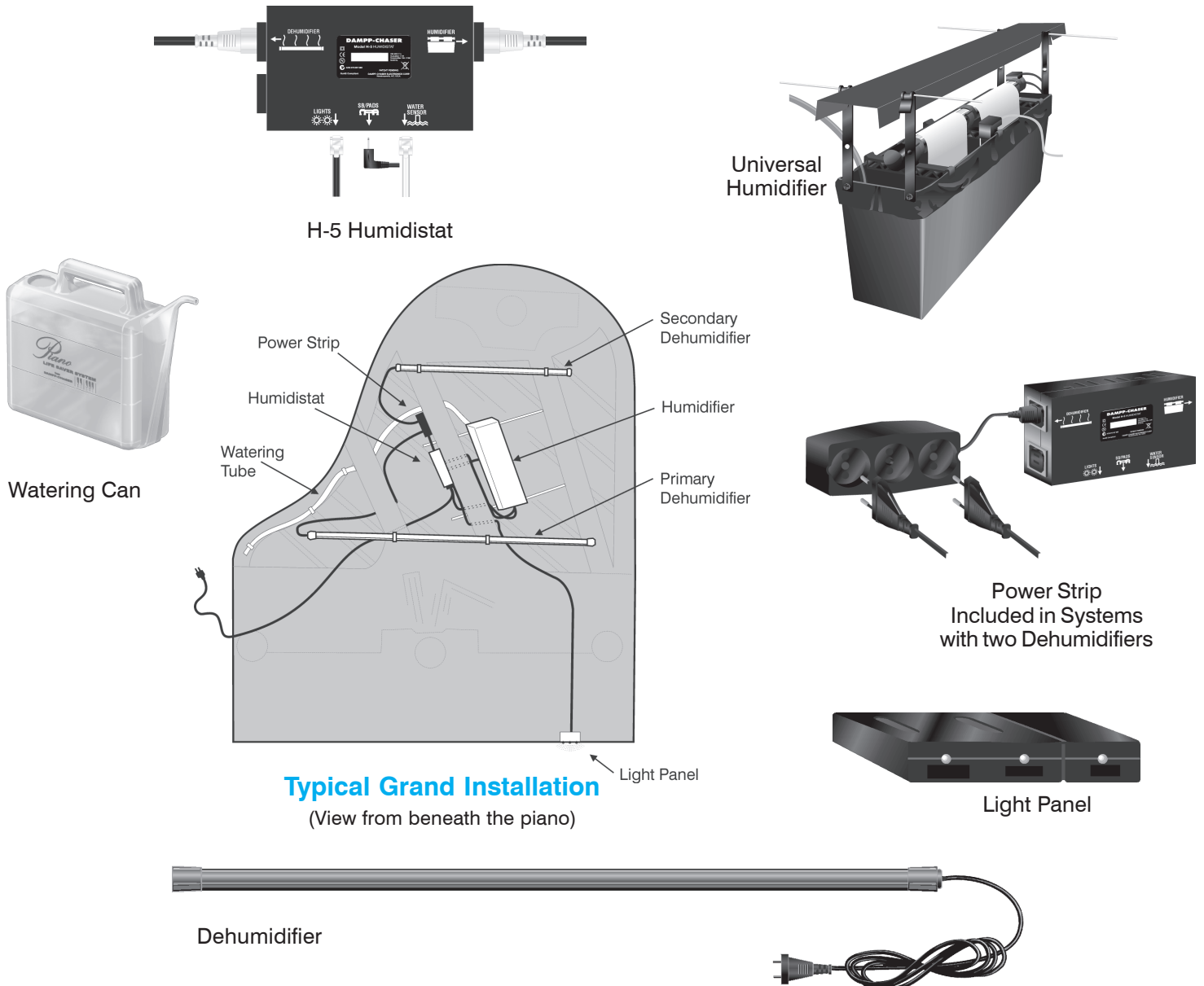
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GRAND PIANO SYSTEMS

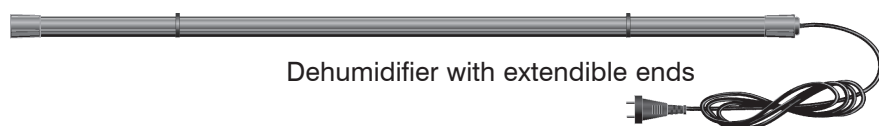
MODEL	DESCRIPTION
G6PS	Grand 6-Part System with an H-5 Humidistat, a 38-watt/91 cm primary Dehumidifier, a 25-watt/61 cm secondary Dehumidifier, one Universal Humidifier with a Smart Bracket and a Power Strip.
G5PS	Grand 5-Part System with an H-5 Humidistat, a single 38-watt/91 cm primary Dehumidifier, one Universal Humidifier and a Smart Bracket. For small grand (less than 172 cm).
G7PS	Grand 7-Part System with an H-5 Humidistat, a 38-watt/91 cm primary Dehumidifier, a 25-watt/61 cm secondary Dehumidifier, two Universal Humidifiers with one Smart Bracket and two Power Strips. For large concert grands. Also recommended for medium-sizes grands in extremely dry conditions.

OPTIONAL SYSTEM CHANGES: Any System may be ordered with an audible warning Beeper (attached to the Humidistat), to signal the need for water.



VERTICAL PIANO SYSTEMS

MODEL	DESCRIPTION
5PS	5-Part System with an H-5 Humidistat, an extendible 38-watt/91cm Dehumidifier, a Universal Humidifier to be installed in the front of the piano, and a Smart Bracket



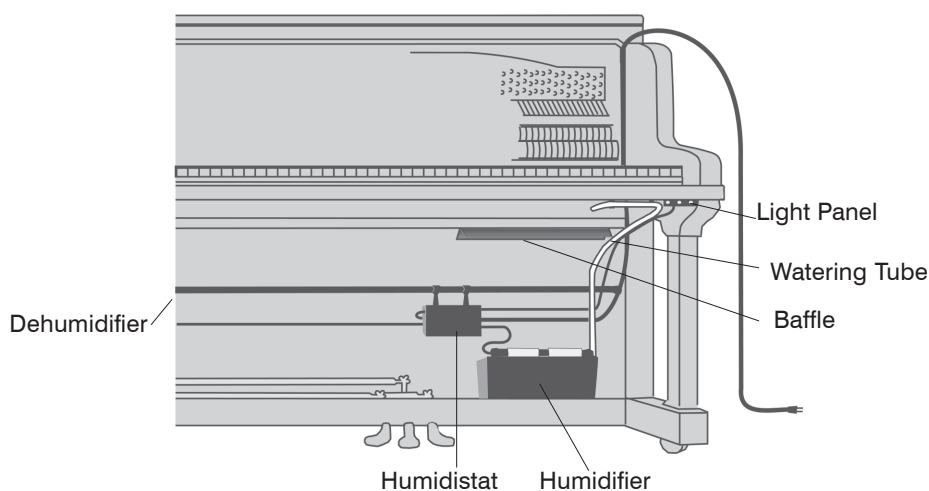
Dehumidifier with extendible ends



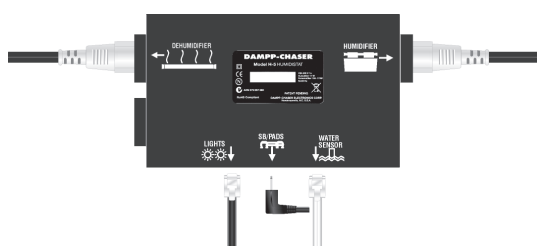
Light Panel



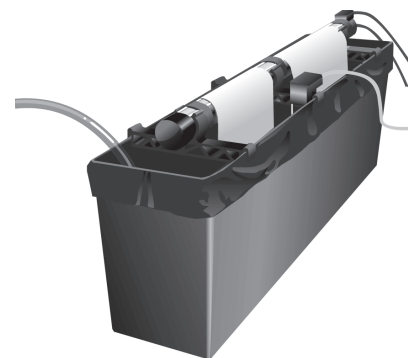
Watering Can



Typical Vertical Installation



H-5 Humidistat



Universal Humidifier

Why Pianos Need the Piano Life Saver

The most important part of good piano maintenance is keeping the humidity as constant as possible. Because tuning instability and physical deterioration are the obvious results of continued humidity extremes, the installation of a Piano Life Saver System is the best way to ensure the piano is protected from the devastating effects of humidity changes.

The Piano Life Saver System consists of one or more **Dehumidifier** rods to lower humidity, one or more **Humidifiers** to add humidity, and a **Humidistat** which senses whether the wooden parts of the piano are too moist or too dry. Through a

cycling action, the Humidistat is calibrated to create a separate environment within the piano, producing a range of humidity which, in turn, provides a stable moisture content in the wooden parts. **This constant cycling action stabilizes pitch and protects the piano from deterioration.** Used in conjunction with the System to combat extreme air movement in the room, a **Grand Undercover** or **Vertical Backside Cover** may be mounted on the piano to further stabilize the pitch. In particular, Covers are recommended for use with the System when the piano is located in a church, institutional or commercial building (see Covers, page 5).

Humidistats

The Humidistat controls the Humidifier and Dehumidifier and comes with a 3-meter power cord. Since 2006, Damp-Chaser Systems include either a model H-5 Humidistat or a model H-D Humidistat. Both Humidistats may be used in a grand or a vertical piano. The H-5 model (**Figure 1**) is included in Systems that both humidify and dehumidify. The H-D model (**Figure 2**) is used in Systems which only dehumidify.

Humidistats offered in Europe maintain pianos at 50% relative humidity.

H-D Humidistat



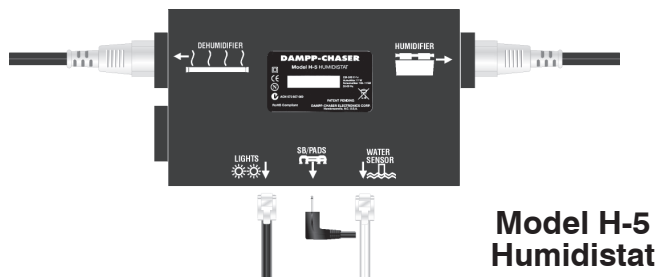
Figure 2

The H-D Humidistat can accommodate two Dehumidifiers and does not accommodate a Humidifier.



Figure 4

A Power Strip is provided in Systems that include two Dehumidifiers. The Dehumidifiers are plugged into the Power Strip which is mounted near the Humidistat. Then, the Power Strip is plugged into the Humidistat outlet marked "Dehumidifier."



Model H-5 Humidistat

Figure 1

The H-5 Humidistat is equipped with modular "plug and play" attachments including the Light Panel (**Figure 3**), the Smart Bracket (see page 6), and the Water Sensor (which is mounted inside the Humidifier, with the sensor probes pointing down into the water—see **Figure 5** below).



Figure 3

The Light Panel is attached to the Humidistat (see **Figure 1**). Indicator lights on the Panel: POWER=ON (green); WATER=Needs water (yellow); PADS=Needs Humidifier Pads changed (red).

PLEASE NOTE

- All Humidistats are available with an audible warning Beeper to signal low water.
- When a Humidistat from an older System needs replacement, the H-5 (with all modular attachments), or the H-D will be used as the replacement.

Humidifiers

The Humidifier brings moisture into the piano through the circulation of warm, moist air currents. Air currents are produced when evaporator pads wick water from the tank over the warm Heater Bar on the Humidifier. A plastic Baffle, installed above the Humidifier, aids in the dispersion of water vapor coming off the Humidifier pads and protects the grand soundboard and the vertical keyboard from condensation. The Universal Humidifier (**Figure 5**) is included with all complete Systems. (You may encounter three other sizes of Humidifiers as you service older Damp-Chaser Systems.)

Maintenance Note: Humidifiers should be cleaned once a year. The Universal Humidifier (**Figure 5**) can be cleaned by simply removing the plastic liner and replacing it. Liners are included in packages of replacement pads available from your Damp-Chaser distributor.

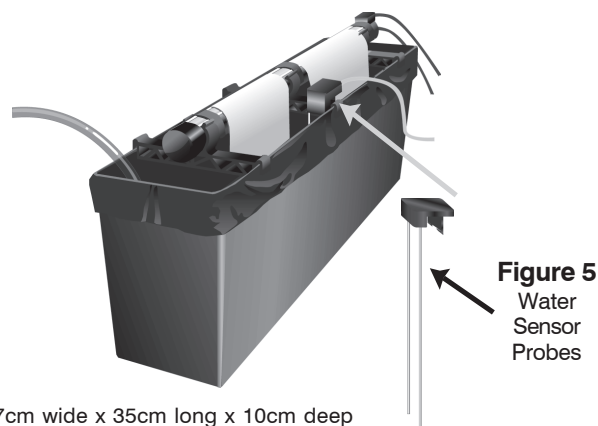


Figure 5
Water Sensor Probes

17cm wide x 35cm long x 10cm deep

VERTICAL Pianos: If trapwork prevents setting the Humidifier on the bottom board, suspend it above the trapwork (directions are included with the System).

GRAND Pianos: 7-Part Grand Systems, which include two Humidifiers, are used primarily in concert grands (244cm to 308cm). If a smaller grand is located in very dry conditions, it is appropriate to use two Humidifiers, providing the piano is large enough to accommodate two tanks.

Humidifier Supplies

PAD Treatment

Dampp-Chaser® PAD Treatment was formulated to increase the life of Humidifier pads and to minimize bacterial and algae growth in the Humidifier tank and watering tube. Please instruct the piano owner to add one capful of PAD Treatment to each full watering can.

WARNING: ADD ONLY DAMPP-CHASER PAD TREATMENT TO THE HUMIDIFIER WATER. Other brands of water treatment may contain acids which can corrode strings and metal parts in the piano. The use of other water treatment preparations will void the warranty of the Piano Life Saver System and may void the warranty of the piano manufacturer.



16 oz.
Lasts about
two years

*Remember, when you order, the
12-Pack of PAD Treatment is the Best Value!*



16 oz.

Humidifier Pads

Humidifier Pads wick water across the Humidifier heater bar to bring moisture into the piano (see pads on Humidifier, page 3). If the pads are caked with mineral deposits or hardened on top, the Humidifier will not be effective.

Humidifier Maintenance - To ensure a properly functioning Humidifier, the pads should be changed at least twice each year. This applies whether a Smart Bracket is used or not (**Figure 6, page 5**). Change pads during the fall and then again in the spring. Replacement pads can be obtained from any Dampp-Chaser distributor. Clean the Humidifier once each year by removing and replacing the liner. When you replace the liner, also replace the plastic Clean Sleeve® on the Humidifier Heater Bar to protect the Bar from excessive corrosive minerals in the water (**Figure 6, page 5**). The Sleeve is sold in a separate 12-pack and is also included with Humidifier Pad packs.

Smart Bracket Maintenance: The sensor wires can sense the pads are wicking water properly only if the wires are kept free from corrosion and minerals. During pad changing, remove the Bracket from the Heater Bar. Then remove the mineral residue on the wires by scrubbing with a pot scrubber or by scraping with the edge of a knife held perpendicular to the wires. Alternatively, it may be simpler to bring a new SB to replace the old one. Replacement Smart Brackets are available from your Dampp-Chaser distributor.

*Replacement pads are available
in (2) package sizes: the 4-Pack
and the 48-Pack.*



*The 48-Pack of
Humidifier Pads is
your Best Value!*



About Dampp-Chaser Humidifier Pads

After extensive testing of various pad fabrications, we selected a lightweight, durable, highly absorbent Humidifier pad with antimicrobial properties and a low lint level to help control residue buildup on sensors.

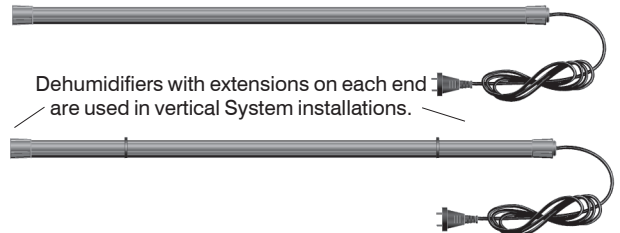
Dehumidifiers

Dehumidifiers remove excess moisture from the piano and are available in various lengths, wattages and cord lengths. Dehumidifiers used in vertical piano installations have extendible ends.

In grand Systems, at least two Dehumidifiers are recommended. A "primary" Dehumidifier is installed parallel to and behind the belly rail; the "secondary" Dehumidifier is installed in the tail of the piano (see page 1). Primary Dehumidifiers are 91cm long; secondary Dehumidifiers are 61cm long.

A third Dehumidifier may be installed under the keyed frame in front of the lyre to eliminate key sluggishness (we recommend the 25-watt/61cm).

Pianos (grands or verticals) in extremely humid conditions may require additional Dehumidifiers mounted near the soundboard to achieve pitch stability.



Dehumidifiers with extensions on each end
are used in vertical System installations.

DEHUMIDIFIER-HUMIDISTAT POLICY

Dampp-Chaser recommends that ALL Dehumidifiers be controlled by a Humidistat. This policy protects the piano from over-drying. It also protects your reputation as a professional piano technician and our reputation as a manufacturer.

Smart Bracket (SB)

The Smart Bracket (SB) was developed to eliminate uncertainty as to when to change Humidifier pads.

The two **Humidifier pads**, which must drape across the heater bar, are critical to the Humidifier's operation (**Figure 5**). Designed to wick water over the Heater Bar, Humidifier pads produce warm, moist air currents which rise and are circulated throughout the piano.

When Humidifier pads dry out and no longer wick water, the red SB light, marked **PADS**, blinks (**Figure 6**). The SB also shuts off the Humidifier Heater Bar so it does not dry the piano when the Humidistat is calling for moisture.

NOTE: If the SB is not mounted OUTSIDE the plastic Clean Sleeve (**Figure 6**), the red "Pads" light will blink constantly.

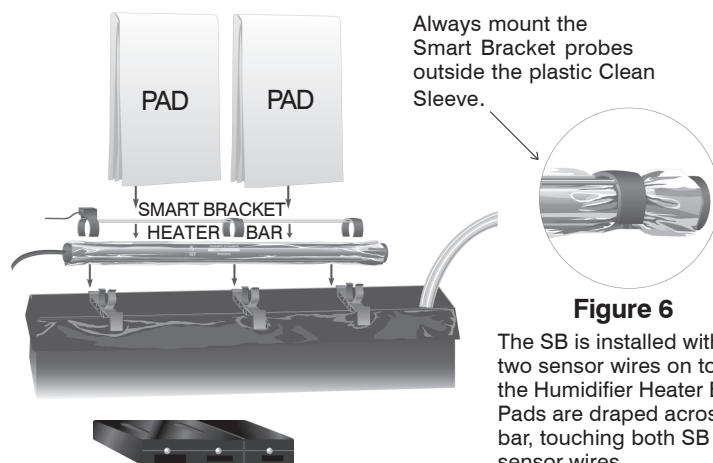


Figure 6

The SB is installed with the two sensor wires on top of the Humidifier Heater Bar. Pads are draped across the bar, touching both SB sensor wires.

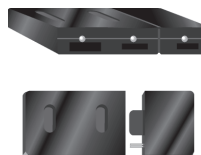
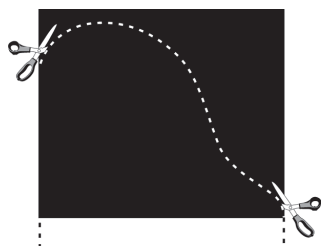


Figure 7

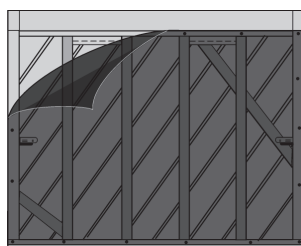
The SB includes a Single-light Cube which is joined to the Two-light Panel.

Grand Undercover® & Vertical Backside Cover®

The **Grand Undercover** and **Vertical Backside Cover** (see below) are optional components which were developed to combat air movement and enhance pitch stability. **If a piano with a System is more than 5 cents off pitch, extreme air movement is probably the cause for instability.**



Grand Undercover being aligned on top of the Piano before cutting. Undercovers are available in three sizes to fit small to large grands.



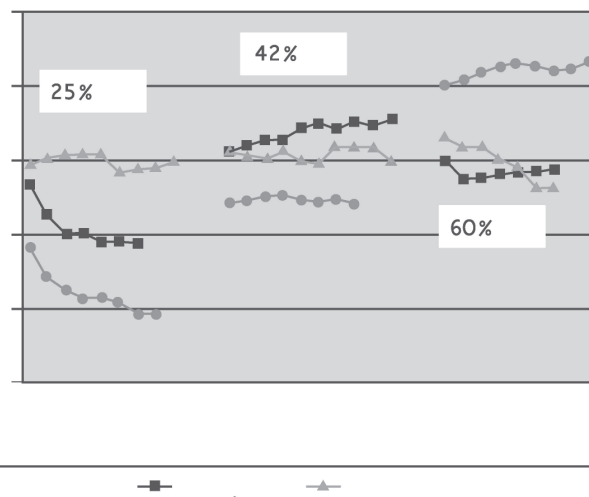
Backside Vertical Cover

Please Note: a) All Dampp-Chaser Piano Covers are protected by patent. b) The Undercover must be used with a between-the-beams installation of the Humidifier. It cannot be used with an under-the-beams installation where the tank hangs lower.

Tests prove **Piano Life Saver Covers** eliminate the negative effects of air currents

The graph below reflects experiments with the Grand Undercover. Even with air movement of 15 meters per minute and room relative humidity levels of 25%, 42%, and 60%, the Undercover steadily maintains a soundboard moisture content of 7%.

NOTE: Besides climatic protection, the Covers deliver aesthetic benefits by covering the back of an exposed upright piano and by hiding the Piano Life Saver in a grand.



Which pianos need the Covers?

Pianos in the Home: Windows, doors, vents, foyers, and hallways are the sources of extreme air movement which leads to pitch instability. The installation of a Cover keeps the pitch more stable between tunings. When a piano continues to require pitch corrections after the Piano Life Saver System is installed, usually the cause is extreme air movement. In residential settings, the Covers provide enough protection against the external environment to permit the piano to be located almost anywhere in the room.

Pianos in Institutions: Covers are used in universities, churches and any commercial setting where government regulations dictate elevated air movement to combat "sick building syndrome." In these settings, **every** System installation should include an Undercover or Backside Cover to achieve maximum pitch stability. The Undercover and Backside Cover stabilize the soundboard's moisture content in **conservatory and university practice rooms and concert halls**—which are the ultimate tests!

HOW TO STABILIZE PITCH IN EXTREMELY DRY CONDITIONS

According to Piano Life Saver System installers, the System stabilizes pitch to the degree that pitch corrections are not required before a fine tuning can be performed. To maintain pitch stability in severely dry conditions, for a grand, use the System that includes two Humidifiers, the Grand Undercover, a 100% wool string cover and keep the lid closed as much as possible. For the vertical piano, use the Vertical Backside Cover® in addition to the System.

Technician Diagnostic Guide

When System questions arise, first check connections.

- Verify the functioning of the wall outlet. It is critical that this outlet is not operated by a light switch, or you may find the piano owner accidentally turning the System on and off throughout the day.
- Verify the secure connection of all plugs. Color coding, new icons, and varying plug styles help ensure correct placement of plugs for the H-5 Humidistat.

How to test the functioning of Humidifier Heater Bars and Dehumidifiers

There are two types of Humidifier Heater Bars:

1) the Smart Heater Bar (SHB), which was sold prior to 9/06 and the release of the H-5 Smart Bracket (SB) attachment, and 2) a standard Humidifier Heater Bar. Verify the functioning of a Humidifier or Dehumidifier bar in one of the ways listed below. Remember to allow the bar a few minutes to become warm. Humidifier bars are only 8 watts and therefore warm less than Dehumidifier bars which have higher wattages.

- Plug the bar into an extension cord run to a working wall outlet. Confirm contact between SHB probes with wet pads or alligator clips during this test.
- Keep the bars plugged into the Humidistat and run component tests by switching the System to the mode in question. Temporarily switch a System to dehumidification mode by blowing into the Humidistat to humidify the air inside. Two or three humid breaths toward the white sensor band will cause the System to dehumidify and the Dehumidifier will begin to heat up. Temporarily switch a System into humidification mode with a hairdryer to dry the air around it. A few sweeps with the hair-dryer 2-3 inches away from the slots over the white sensor band will cause the System to humidify and the Humidifier Heater Bar will then heat up.

The Importance of Water Quality

The type and quality of water used by a piano owner can influence the functioning of the System. In most cases, local tap or well water works great. There are areas, however, that provide acidic water or water with a high mineral content. Either of these circumstances may damage the integrity of the Humidifier Bar and/or the other metal System components. In these cases, we recommend a change to distilled or purified water.

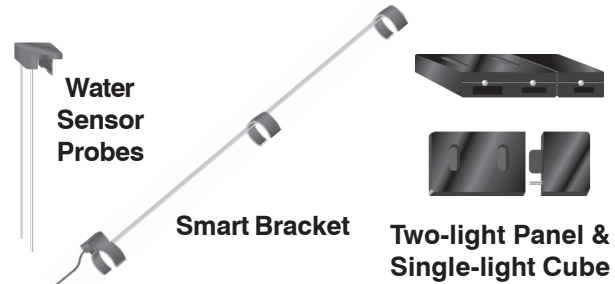
Dampp-Chaser PAD Treatment should be used by System owners to inhibit mildew in both the watering tube and Humidifier tank and to

increase the life of Humidifier pads. Treatment use is also vital when purified or distilled water is used because the Treatment (not salt) added to the water replaces needed electrolytes. Electrolytes allow electricity to pass between low water sensors through the water and permit the light to work properly. **Use only the Dampp-Chaser brand of PAD Treatment. The use of other water treatment brands will void the warranty of the Piano Life Saver System. Other brands may contain acids which corrode strings and damage the piano's metal parts.**

H-5 Field Replacement Kit

Our goal, in offering the Field Replacement Kit, is to save you time and money by eliminating callback appointments.

The Kit includes Water Sensor Probes, a Smart Bracket (SB), a Two-light Panel, and the Single-light Cube. This kit provides one of each type of accessory to the H-5 Humidistat to diagnose issues in the field. Use items from the Kit for replacement of a faulty or damaged part. When you make warranty replacements, call your Dampp-Chaser distributor to replenish your Kit. For non-warranty replacements, charge the customer for the part and replenish your stock through your distributor.



CAUTION GUIDELINES

You are responsible for making a proper System installation by carefully following product instructions.

PLEASE PAY STRICT ATTENTION TO THE FOLLOWING ISSUES:

- 1) **GRAND PIANO** – The soundboard of a grand piano can be exposed to condensation if the Humidifier is installed too close to the soundboard, counter to the instructions. Specifically, do not shorten the Humidifier hangers if you are making a between-the-beams installation.
- 2) **VERTICAL PIANO** – The vertical piano can be exposed to excessive condensation from the Humidifier if the baffle is not installed.
- 3) If a cord/wire in the System is installed in direct contact with a Dehumidifier heating rod, over time, the cord/wire could dry out and crack, posing a fire or shock hazard. Carefully anchor cords/wires away from the Dehumidifiers with the ties and clamps provided with the System.
- 4) Do not use a Dehumidifier in the action of the piano without a Humidistat to control it. To dehumidify the action, we recommend you install a 91cm, 25 watt Dehumidifier outside the case, under the keyboard, and plug this Dehumidifier into the System's Humidistat.
- 5) Advise your clients that they should only use Dampp-Chaser PAD Treatment in the Humidifier. Other brands of water treatment may contain acids which can corrode strings and metal parts in the piano. Use of another brand of water treatment voids the System's warranty and may also void the piano manufacturer's warranty.

OTHER IMPORTANT INFORMATION

- 1) The newly-installed Piano Life Saver System will alter the piano's wood-moisture content and, therefore, alter the tuning. Ideally, the System should be installed 3 weeks BEFORE the piano is tuned.
- 2) A frayed or cracked electrical cord/wire can cause a fire or shock. If the piano runs over the power cord it can be damaged. Please inspect the System's cords/wires each time you service the piano.
- 3) Installation of the Piano Life Saver System must be made by a professional Piano Technician or Tuner. Any warranties stated or otherwise implied are void if the installation is made by someone other than a professional Piano Technician or Tuner.

Warranty Service Call Policy:

The 5-Year Warranty for the System covers parts only. Dampp-Chaser Corp. assumes no responsibility for piano technician labor in maintenance, repair or warranty service calls related to the Piano Life Saver System. When Systems are priced according to the manufacturer's guidelines, most installers agree there is sufficient compensation to cover a possible warranty service call. At the time you install the System, please explain any post-installation fees to the System owner.

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To Access "Technicians Only" pages on website, www.PianoLifeSaver.com • Log in with User Name: piano.tech Password: only

The Extraordinary Evolution of the Piano Life Saver System

The Dampp-Chaser Piano Life Saver System has evolved through seemingly simple steps over six decades. When these developments are combined into the Systems of today, the result is extraordinary.

From 1947 until 1964, a “Dampp-Chaser” was a single component: the Dehumidifier rod. Initially, inventor Allen Foote developed the Dampp-Chaser to combat dampness in small confined spaces and later found that pianos could benefit from the product as well. The Dehumidifier was applauded for its ability to help stabilize the piano’s pitch in highly humid conditions. In dry conditions, piano

owners simply unplugged the Dehumidifier.

In 1972, Mr. Foote upgraded the “piano-dryer” with the Humidistat which turned off the Dehumidifier automatically when the piano was sufficiently dry. That same year, the Humidifier was introduced, and now the product protected the piano throughout the year against both high and low humidity extremes.

Today, hundreds of thousands of pianos are protected by the Piano Life Saver System, and it is recommended by outstanding piano, soundboard, and keyboard manufacturers worldwide.

DAMPP-CHASER, A CHRONOLOGY

- 1947 Dehumidifier invented (silver aluminum, 15, 25 and 35 watts)
- 1951 Dampp-Chaser Electronics become incorporated
- 1964 Extendible Dehumidifier introduced to product line
- 1972 Humidistat invented (brown metal case with two female electrical outlets)
- 1972 Humidifier for vertical piano introduced (“trash can” evolved to black molded plastic tank)
- 1979 Low Water Indicator Light invented (amber light, plugs into wall)
- 1984 Humidifier for grand piano introduced
- 1986 Dehumidifier for piano changed to black color, added 50 watt
- 1987 H-2 Humidistat evolved to black molded plastic case;
Low Water Light now plugs into Humidistat with phono jack
- 1995 Introduction of Humidifier Treatment to keep tube and tank algae-free
- 1996 Smart Heater Bar introduced with red “Pad Warning Light”
- 1998 Introduction of the H-3 Humidistat with the 3-Light LED Panel
- 1998 Back cover for vertical piano introduced to combat extreme air movement
- 1999 H-4 Humidistat introduced; hard wired to LED and to Low Water Light
- 2000 Completed Schematic diagrams of 85 grand pianos showing System components
- 2001 Undercover for grand piano introduced to combat extreme air movement
- 2003 Introduction of the H-3 and H-4 Universal Humidistats
- 2003 Introduction of the Universal Humidifier Tank for both grand and vertical pianos
- 2006 Introduction of the Universal H-5 Humidistat for use with grand and vertical pianos; with three “plug and play” modules
- 2006 Introduction of the H-D Humidistat for Dehumidifier systems
- 2006 Introduction of the Smart Bracket; used in conjunction with H-5 Humidistat, SB converts any Humidifier heater bar to a “smart” bar

DAMPP-CHASER CORPORATION

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