

DBK **Drymatic®** **Boost Bar**

Adaptable Heat Drying System

INSTRUCTION MANUAL

Model: FGPH109

Manufactured in the UK by DBK Technitherm Ltd

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WARNING!

- Ensure that you have read and understand this manual before operating the machine.
- Do not overload outlets or extension cords. Check power ratings before use.
- Risk of electric shock. Do not open the unit or try to reach through the grills.
- Ensure a suitably sized air mover is used that matches the size of the Drymatic Boost Bar inlet.
- Minimum recommended airflow required: 650cfm (1100m³/hr).
- Do not position air mover more than 20" (50cm) away from the Drymatic Boost Bar inlet.



An electronic version of this instruction manual is also available online via this QR code

www.dbkusa.com



Housing Only

Congratulations on Your Purchase!

Congratulations and thank you for your purchase of the Drymatic Boost Bar! In order to get the most out of your Boost Bar please take the time to read this user guide and familiarize yourself with the machine's operation and features.

The following pages contain important warranty and warning information. You must take the time to read them before operating your product.

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FCC COMPLIANCE STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

INDUSTRY CANADA STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT SAFETY INFORMATION:



HANDLE WITH CARE!



KEEP AWAY FROM CHILDREN!



RISK OF ELECTRIC SHOCK!



RISK OF BURNS!

- Do not alter or modify your Drymatic Boost Bar in any way. Use only replacement parts approved by DBK. Modifications/repairs not covered in the maintenance section of this manual and the use of unapproved parts will void any remaining warranty.
- Do not remove adhesive labels.
- Only use Drying Mats/accessories branded by Drymatic or DBK. Ensure air movers match the Boost Bar inlet size: recommended airflow is 650cfm (1100m³/hr) (Manufacturers recommended airflow)
- Maximum Airflow (tested) 1560cfm (2650m³/hr)
- Handle the unit carefully. Always operate the unit on a flat stable surface. Do not drop, throw or place the unit on a surface from which it could fall off. Rough handling may damage the unit, create dangerous operating conditions and will void the warranty.
- Never pull or lift the product via the power cord.
- Children should be supervised to ensure they do not play with the appliance.
- The appliance is not intended for use by persons (including children) with reduced physical, sensory and mental capabilities or lack of experience or knowledge, unless they are supervised by an adult.
- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Always grasp the plug (not the cord) to unplug and avoid pulling or lifting the product via the power cord.
- Do not use with worn electrical outlets as the plug will become excessively hot. The heater shall not be located immediately below a power outlet.
- Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.
- Do not overload outlets or extension leads - Check power ratings and condition before use. Always fully unwind extension leads.
- It is recommended to run the unit on a 120V supply circuit protected by a Ground Fault Circuit Interrupter (GFCI) or a RCD. It is also recommended to regularly PAT (Portable Appliance Test) the machine. Only replace fuse with a 15A, 500V ceramic type as marked on the unit.
- In order to avoid overheating, do not cover the entire unit. Ensure that when mats deflate they do not cover any equipment/outlets causing a hazard.
- Do not use in the immediate vicinity of a bath, shower or swimming pool. Avoid standing water or locations where water can run or drip on to the unit.
- Keep away from open flames and heat sources or where vapors from gasoline, solvents, thinners or any other flammable materials may be present.
- Do not block either Boost Bar outlet/inlets. This could cause the unit to overheat and limit airflow.
- For commercial use only, not for use on building sites.
- Do not dispose of in municipal solid waste.
- Stacking is for storage purposes only, do not use units when stacked or stack other equipment on top.

Introduction:

Drymatic Boost Bar is an adaptable heat drying system designed to reduce drying times. The machine is placed in front of an air mover to heat airflow in a drying environment and can also be used with Drymatic Wall & Floor Systems to effectively target dry specific areas of water damage. The addition of controlled heat increases drying performance on a water damage project; it also helps to enhance the performance of conventional drying equipment, such as refrigerant dehumidifiers, where temperatures are often below optimum operating conditions.

How it works:

Raising the temperature of water damaged materials increases their vapor pressure and increases the potential for evaporation, resulting in more efficient drying. The DBK Drymatic Boost Bar has an intelligent control system that regulates its output to ensure that the temperature stays below the specified limit by varying the power of the heating device.

The Drymatic Boost Bar, when combined with a Drymatic Wall & Floor Accessory System or Drymatic Boost Bar Attachments, becomes an extremely effective target drying solution. Target drying focuses the heat energy on a specific area of water damage, allowing the technician to remain in full control over what materials are dried and to what temperatures they are exposed. In many cases a restoration project will include a variety of different materials that need to be dried in different ways. Target drying enables the controlled application of heat and airflow, which results in vastly improved drying times.

Features:

- **Adds up to 1.4kW (4,780 BTUs) of heat energy into the room to reduce drying time.**
- **Three intelligently controlled self-regulating PTC heater banks that raise room temperature up to a maximum of 122°F (50°C).**
- **Touch screen controller which displays incoming and outgoing temperature, kWh and hours run.**
- **Airflow detection and power regulation to ensure safe operation whilst adding maximum power - UL Approved.**
- **Bi-directional design can be operated with any standard styled air mover.**
- **Allows users to attach a huge range of Drymatic Wall and Floor System mats and accessories to quickly and efficiently dry small areas.**
- **Compact, lightweight and rugged construction which is stackable for easy transportation and storage.**
- **Fixed power cord with built in cord wrap for plug in and go operation.**

About the Heating Elements:



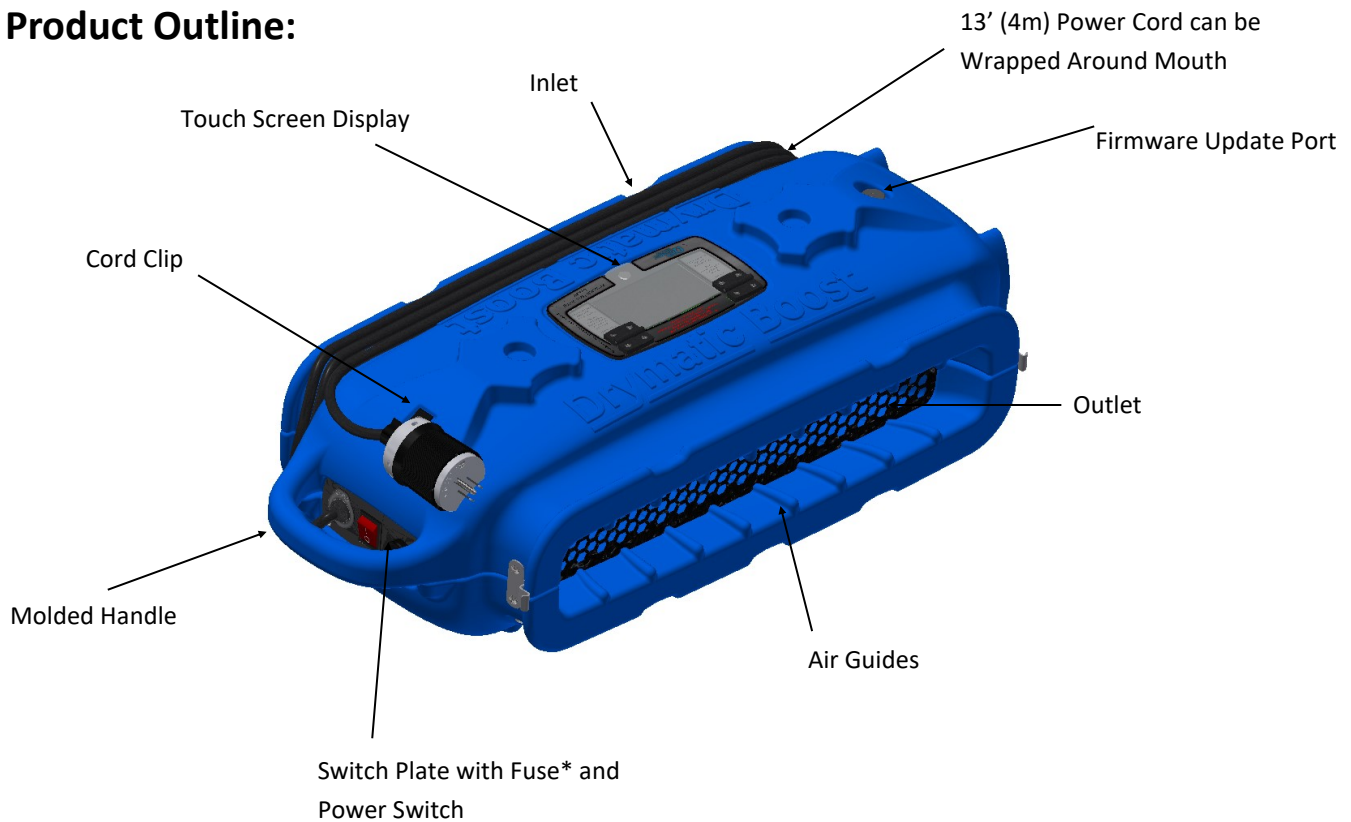
Drymatic Boost Bar uses PTC heating elements to provide efficient and controllable heat. These elements self-regulate their power output depending on the volume of airflow passed over them and also the elements operating temperature. This means that if airflow is restricted, the heater will continue to function but with reduced power; protecting both the Boost Bar and the material being targeted. In the event that airflow is completely lost the system will shut the elements down.

The 6 elements you see through the grill are divided into 3 banks of elements which the software ramps up and down in order to 1) Gradually increase the heat and 2) Control the temperature of the room.

The elements are electrically insulated and safe to use in humid/dusty conditions, however they can get hot and should never be touched. If the display is showing all three banks running but the power output is less than expected check for any restrictions in airflow or move the air mover closer to ensure that full power can be reached.

WARNING! - NEVER TRY TO REACH THROUGH THE GRILLS OR TOUCH THE ELEMENTS

Product Outline:



**Only replace fuse with a 15A, 500V ceramic type fuse as marked on the unit. (DBK part number: EC308)*

Storage and Transport:

- When finished with the machine, the fixed power cord can be wrapped around the unit and the plug can be clipped into cord clip as shown. The cord can be wrapped in either direction.
- Units should be carried by the handle on the top.
- Units can be stacked in pairs to form no more than an eight unit high tower (16 units in total ~5' 3" (1.6m))

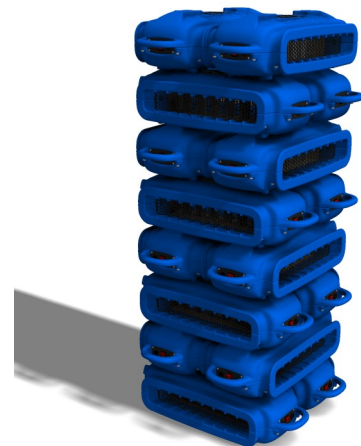
Note: Units should not be operated when stacked and the cord should always be fully unwound when in use. They should be fully secured when in transit to prevent causing harm or damage.



4 units stacked in pairs
(max 16 in this orientation)



Two units stacked directly
(max in this orientation)



Maximum Stack of 16 units

Set up Guide:

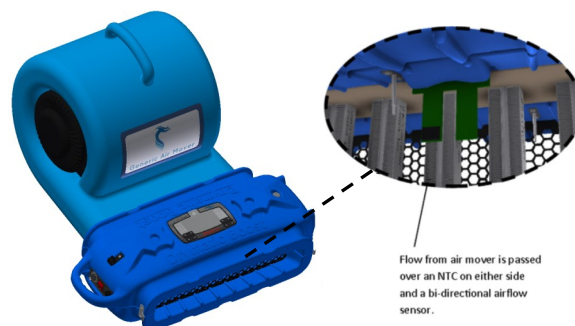
The Drymatic Boost Bar should be set up using the following procedure:

1. Place Boost Bar flat on the floor with an air mover directed at the inlet grill. A Fan to Boost connector can be used to maximize airflow through the unit.
2. Optional - Connect any Drymatic Wall and Floor Systems or any Adaptors you plan to use.
3. Plug the machine in and power on the air mover followed by the Drymatic Boost Bar.
4. Reset the kWh and Hours Run meters, set your maximum temperature and press Start.

1. Position Drymatic Boost Bar with an air mover

Place the Boost Bar flat on the floor in the area/room you wish to dry. Position an air mover so that its outlet lines up with the Boost Bar inlet.

Note - The air mover outlet should be approximately the same size as the Drymatic Boost Bar inlet and should be positioned a maximum of 20" (50cm) away from the grill. Ideally the air mover outlet should be as close as possible to the Drymatic Boost Bar inlet. We recommend that the air mover be rated for at least 650cfm (1100m³/hr). Failure to meet these requirements could cause the machine to limit its power output or potentially turn off the heater completely until airflow is improved.



Drymatic Boost Bar will always require airflow to function. The machine has sensors to detect the presence and temperature of the input air and will control the heater accordingly. If no airflow is detected or if it is removed, a no airflow symbol will appear on the display to indicate this. When an air mover is added the machine will analyze the airflow for approximately one minute to confirm that it is stable before heating up.

2.1 (Optional) - Connect Drymatic Wall and Floor System

If you wish to target dry an area you may wish to use a Drymatic Wall and Floor System (sold separately).

To connect a Wall and Floor System you will need to first put the Velcro adaptor (FGB346) around the outlet of the Drymatic Boost Bar with the hook side up. Position the Wall or Floor mat with the side with the holes facing down (logo on top) and open it where you wish to connect the Drymatic Boost Bar.

Place the mat around the Drymatic Boost Bar outlet and close the Velcro, ensuring that a good seal is maintained. Once the air mover is turned on, the mat will inflate and airflow will begin leaving the mat through the small holes underneath.

Many different mats and accessories are available and they can all be connected and extended via Drymatic Wall and Floor connectors - please contact your local Drymatic representative for more information. Once the system is set up, the machine should be set to the appropriate setting for the material being dried. (see step 4 for information on the modes of operation.)



2.2 (Optional) - Connect Drymatic Boost Bar Adaptors*

Drymatic Boost Bar has been designed to work with a series of adaptors that allow you to target the heated airflow into areas that may otherwise be difficult to access such as crawlspaces, ceiling voids, cavity walls, and tented areas.

The Boost Bar is supported by the following adaptors:

A) **4-Port Adaptor: 4 x 4" (100mm) Connections**

This gives you the ability to split the heated airflow into four separate channels. You can now heat four separate areas at the same time. The connector accepts both PVC hoses and lay flat ducting.

B) **12-Port Adaptor: 12 x 1.5" (38mm) Connections**

This gives you the ability to split the heated airflow into 12 separate 1.5" (38mm) channels. You can now use these outlets to heat up difficult to reach locations such as wall cavities, ceiling voids, kitchen cabinetry, and subfloor areas.

C) **90° Adaptor**

This gives you the ability to angle the airflow downwards into a crawlspace or subfloor area. Alternatively the connector can be rotated and the airflow can be angled upwards into the ambient air, keeping the warm dry air away from sensitive flooring materials etc.

Lay flat ducting can be attached to the outlet of this adaptor to take heated airflow up to ceiling level if required.

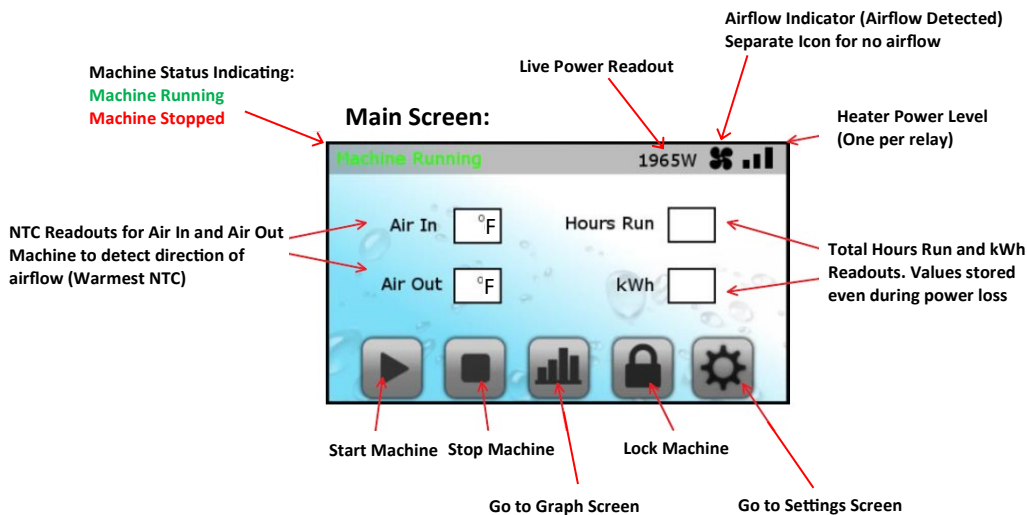
3. Power up the machines

Plug the air mover and the Drymatic Boost Bar into an appropriately rated power outlet/s. Switch the air mover on first, then use the red power switch to turn on the Drymatic Boost Bar. It is good practice to switch on the air mover first, but not essential.

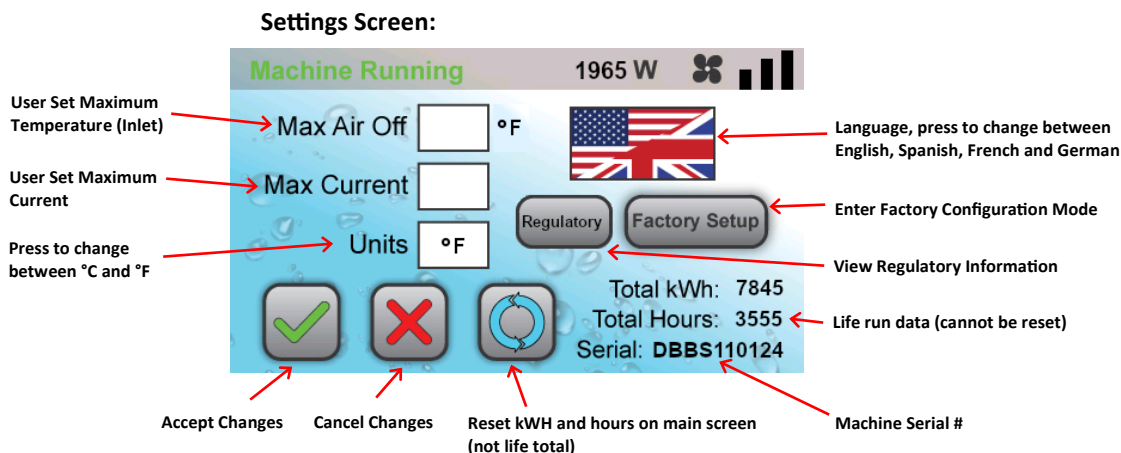
* See Pages 9-11 for further details on setting up the Boost Bar with the Adaptors

4. Set the desired temperature and start the machine

The main screen on the Drymatic Boost Bar control panel can be used to operate the machine (Start/Stop), view the current operating conditions and graphed data. The settings button on the bottom right of the display allows the user to set the maximum temperature limit, maximum current limiter, change the language, and reset the unit ready for the next job:

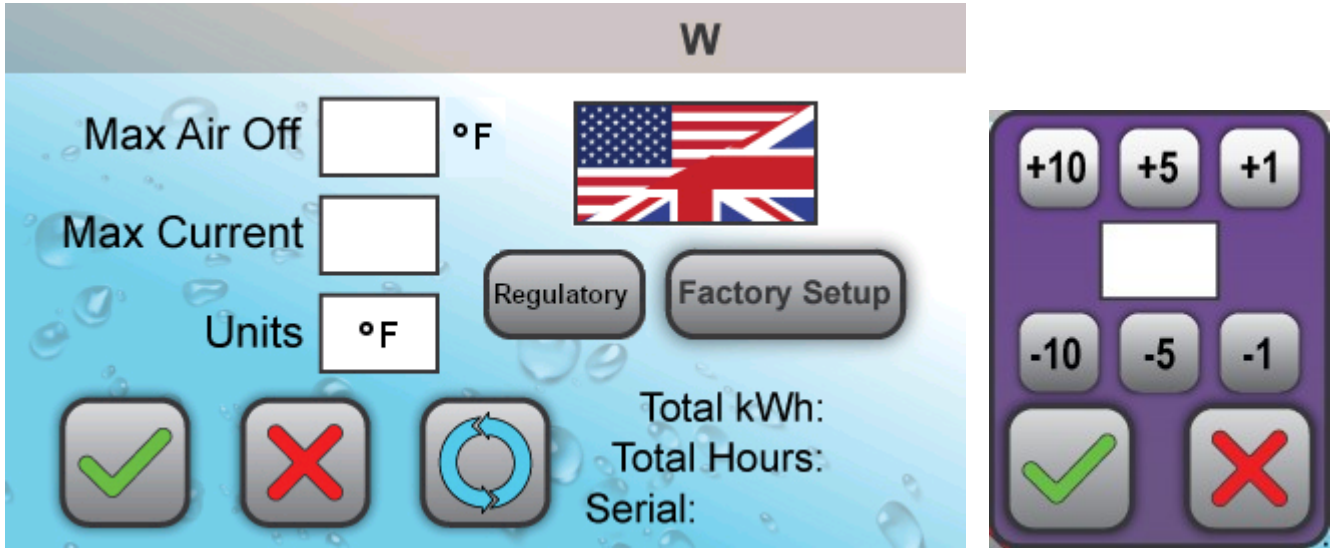


Drymatic Boost Bar has five control buttons along the bottom of the screen; Start, Stop, Graphical Data, Pin Lock, and Settings. The top ribbon shows the machine status; in any situation where the machine is stopped the Start button will restart it from where it previously left off. Similarly the Stop button will put the machine on hold without the need to power it down. In order to correctly understand how the reset button functions, please see 'About the Memory' section. The Settings button on the bottom right of the display takes the user to a new screen and allows them to set the maximum temperature, maximum current limit, reset the device and change the language and units. This settings screen and description of each function is shown below:



5. Current Limiter

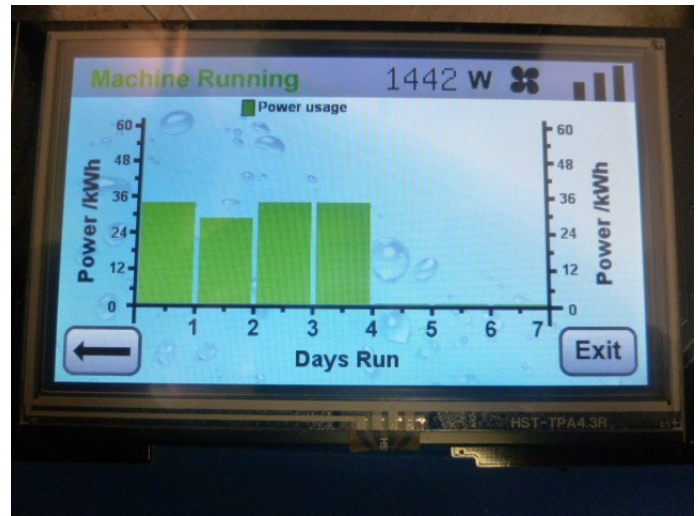
The Boost Bar has an optional current limiting feature that allows the technician to de-rate the heater in the event of limited power availability on site. The user can select the maximum current available on the circuit, and the on-board electronics will then monitor power usage and regulate the heater power based on current draw.



To set the limiter, simply press the value next to 'Max Current' and adjust the value upwards or downwards accordingly. The user should reset the unit at the start of every job to clear any pre-existing settings from previous use.

6. Graphing Feature

The Boost Bar has a built-in data-logging feature that illustrates Temperature Differential and Power Consumption over a rolling 7 day period. This information is useful as it allows a technician to track whether the unit has run at maximum power throughout the claim or whether it has self-regulated and saved energy.



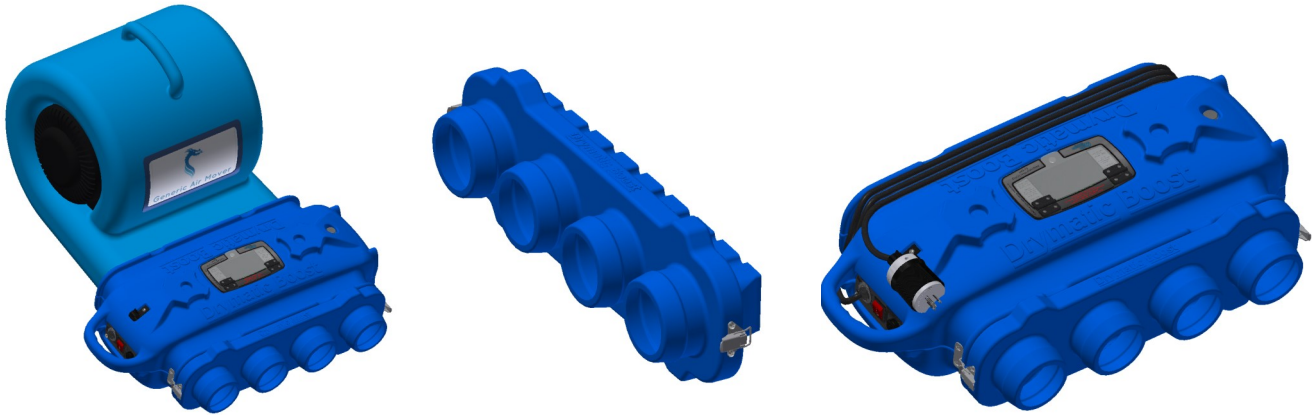
To toggle between the graphs simply press the 'Arrow' symbol.

Fitting Adaptors:

All the adaptors can be secured using the latches fitted to the Boost Bar outlet and the accessories.

A) 4-Port Adaptor (4")

The Drymatic Boost Bar 4-Port Adaptor is designed to split the heated airflow into 4 separate channels; these can then be diverted into other rooms within a property or into separate drying chambers, voids, or cavities.



Step 1 — Connect Adaptor

Take the adaptor and slide it into the outlet of the Drymatic Boost Bar. The adaptor will locate itself between the ribbed features in the outlet of the Boost Bar, secure with the latches.

Step 2 — Connect Hoses or lay flat ducting

The adaptor is supplied with 4 x 20ft lengths of 4" Hose and 4 jubilee clips for securing the hose to the adaptor.

Either 4 x 4" Hoses or 4 lengths of 4" diameter lay flat ducting can be fitted to the outlet ports of the adaptor.

4" (100mm) Hoses

When using Hoses slide the end of the hose over each of the 4 ports and fix in place with a jubilee clip or cable tie.

4" (100mm) lay flat ducting

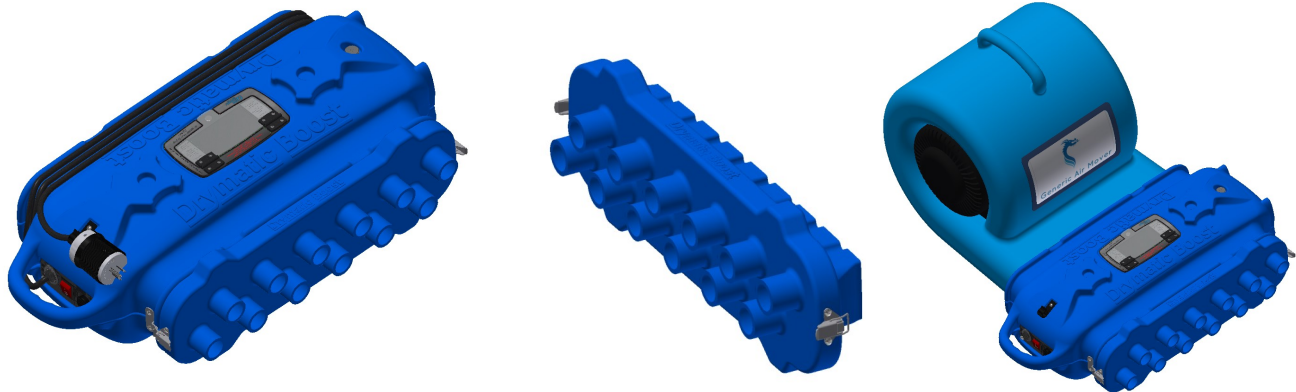
When using lay flat ducting, cut the ducting to the required length and attach one end to the adaptor. The other end can be taken to a tented drying chamber and be secured in place using adhesive tape.

Alternatively, the lay flat ducting can be tied off at the end of each run and the length of lay flat can be perforated to create small jets of airflow along the duct. This duct can then be placed up against the base of a wall/cabinet to focus warm dry air directly onto the affected material or alternatively the duct can be placed in a subfloor space to feed dry air under the floor space.

Please note that the lay flat ducting should be rated for temperatures greater than 140°F (60°C)

B) 12-Port Adaptor (1.5")

The Drymatic Boost Bar 12-Port Adaptor is designed to split the heated airflow into 12 separate channels. These can then be diverted into difficult to reach areas such as kitchen cabinetry, wall and ceiling voids, and subfloor spaces.



Step 1 — Connect Adaptor

Take the adaptor and slide it into the outlet of the Drymatic Boost Bar. The adaptor will locate itself between the ribbed features in the outlet of the Boost Bar, secure with the latches.

Step 2 — Connect Hoses or lay flat ducting

The adaptor is supplied with a kit containing 12 black plastic cuffs, and 2 x 50ft lengths of 1.5" (38mm) plastic hose. Each port is 1.5" and we recommend that users only fit the attachments supplied by DBK for the device.*

Either 12 x 1.5" Hoses or 12 lengths of 1.5" diameter lay flat ducting can be fitted to the outlet ports of the adaptor.

1.5" (38mm) Hoses and Plastic Cuffs

Take one plastic cuff and connect it to the end of the 1.5" hose provided. The plastic cuff will then slide over the 1.5" outlet of the Boost Bar adaptor, no additional fixing is required. Connect each hose to the machine following the same method.

Using a 1.75" (44mm) hole cutter attachment, drill a hole in the material that needs to be dried, such as the base of a kitchen cabinet, insert the hose into the hole created. It is recommended that an additional hole(s) be created to allow the warm, wet air to escape the void/cavity.

1.5" (38mm) lay flat ducting

The unit is designed to accept lay flat ducting and this can be attached to the unit using cable ties or another appropriate form of fixing. The lay flat ducting should be cut to the required length and either be fed in to the tented chamber/area that is being targeted or tied off at its end and perforated to allow air to escape along the length of the duct.

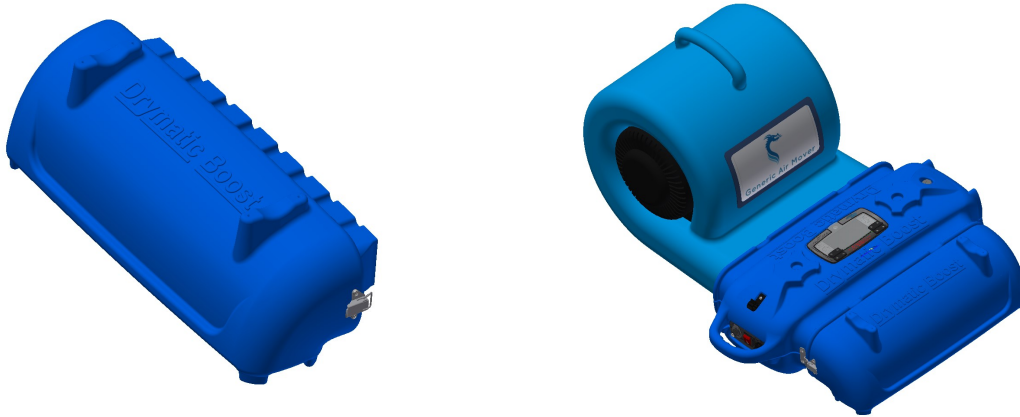
Please note that the lay flat ducting should be rated for temperatures greater than 140°F (60°C)

*Rubber bungs are available separately to seal off individual outlets if required.

C) 90° Adaptor

The Drymatic Boost Bar 90° Adaptor is designed to divert the heated airflow in one of two different ways:

1. Upwards—This could be used to simply heat the ambient air in a room or a ceiling void in combination with lay flat ducting.
2. Downwards—This configuration is to be used when heating up a subfloor/crawlspace area.



Step 1 — Connect Adaptor

Take the adaptor and slide it into the outlet of the Drymatic Boost Bar. The adaptor will locate itself between the ribbed features in the outlet of the Boost Bar, secure with the latches. The adaptor outlet should be placed in the desired orientation by the technician.

Step 2— Connect lay flat ducting (Optional)

Cut the lay flat ducting to the required length and attach to the outlet of the 90° Adaptor using adhesive tape. Take the end of the ducting and feed it in to a tented chamber or directly in to the void/cavity that is being targeted.

Please Note:

When using lay flat ducting tied off at the ends to create a pressure vessel, there will be an increased amount of back pressure placed on the Boost Bar. In this situation the Boost Bar will ramp down heater power and will no longer deliver maximum power.

The Air-Off temperature of the Boost Bar is limited to 122°F (50°C). It is recommended that the lay flat ducting used is rated for temperatures greater than 140°F (60°C).





About the Memory - Drymatic Boost Bar has a built in memory allowing it to continue and resume jobs even if power is lost or removed. This ensures that the machine doesn't forget kWh and hours data and continues on with the same settings that were programmed by the technician.

Job Memory - Keeps track of all kWh/hours data and also the machine settings that were programmed by the technician. This data should be reset at either the start of the new job or end of the previous job to ensure that the next jobs starts fresh. This can be reset from the main display, failure to do so could cause confusion with data.

Note - The Maximum Temperature setting will come in to effect when the Air Outlet temperature exceeds the temperature selected by the user. The Boost Bar will ramp down heater power to keep the Air Outlet temperature below the desired level.

Machine Status Ribbon

The machine status ribbon shows the machines current operating state, operating mode and the heater power level. This table shows all possible situations.

Machine Status:	Description:	Heater Level:	Description:
Machine Running	Machine running as normal.		Full Heater Power
Machine Stopped	Machine on hold, press Start to resume.		66% Heater Power
			33% Heater Power
			Heater Off

User Maintenance:

WARNING: The unit must be unplugged before performing any form of maintenance or cleaning.

Before each use:

Inspect the power cord for any sign of damage. If the cord looks broken, frayed, or worn do not use the product and seek a replacement. Cords should only be replaced by the manufacturer. If the cord is damaged please contact your local Drymatic representative.

Cleaning:

The housing can be cleaned with a mild detergent and warm water. Do not use liquids on the grills and metal plates, these can be cleaned with a soft cloth. Never use a hose to clean the unit and ensure that it is completely dry before use.

Replacing the Fuse:

The fuse can be changed by: 1) Isolating the unit from the power supply. 2) Using a flat head screwdriver to open the fuse holder. 3) Remove the old fuse and replace with new one. 4) Close the fuse holder with screwdriver. Replacement fuses must be 15A, 500V fast blow ceramic types (DBK part number: EC308).

In the event of damage, repairs or any other maintenance requirements please contact your local Drymatic representative. No aftermarket repair on this product should be carried out by the user.

Troubleshooting:

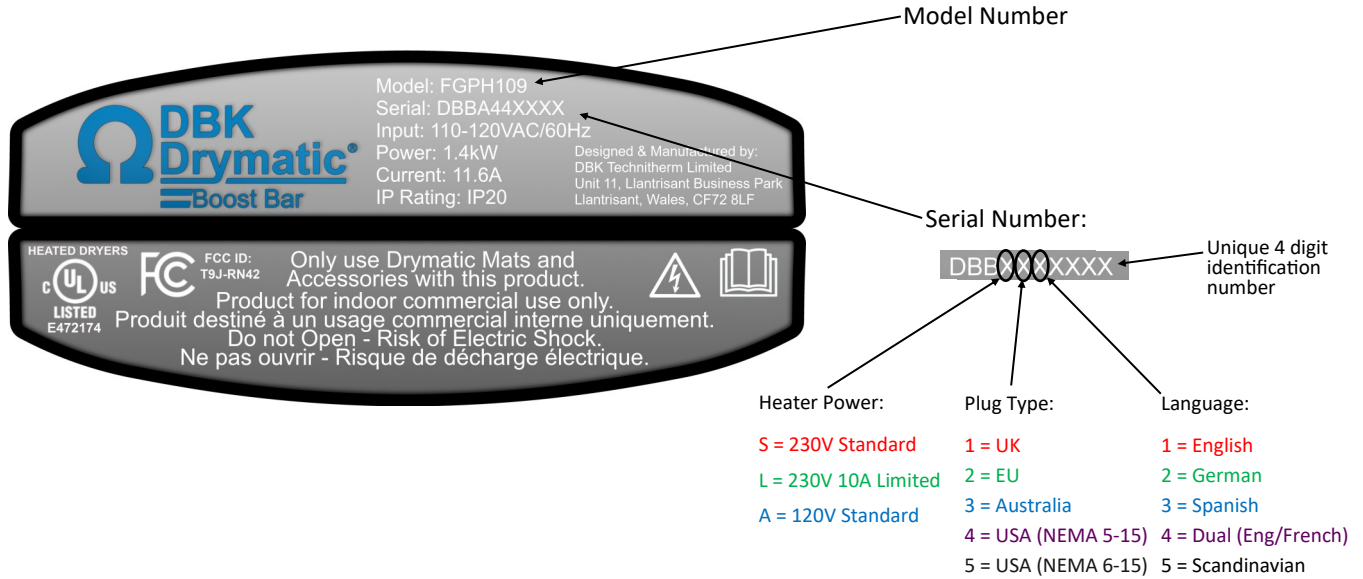
In the event of a fault the first thing to try is to switch off the machine, remove the plug from the electrical outlet, and then wait ten seconds. You can then plug it back in and turn it on again, and see if there are any improvements. If not please refer to this troubleshooting table for causes and solutions.

Fault	Cause	Solution
No power, red power switch is not illuminated when in on position.	1) Plug fuse blown.	Check plug fuse, if plug type doesn't have a fuse contact service.
	2) Fault with electrical outlet or power cord.	Check electrical output and check cord for any damage, breaks or cuts. If cord is damaged seek replacement.
No display, red power switch illuminates when in on position.	1) Internal fuse blown.	Check Internal fuse, it is located on the switch panel next to the red power switch. Replace if necessary.
Unit not producing warm airflow. Fan symbol is marked with a X	1) Insufficient airflow	Try positioning the air mover closer to the Drymatic Boost Bar or use a higher speed setting. Check that the air mover meets the minimum requirements.
Unit not producing hot air. No Rotating graphic is shown in hours display.	1) Machine has not had sufficient time to heat up.	The machine will check for stable airflow before gradually ramping up power. This can take up to five minutes.
	2) Temperature setting is lower than room ambient.	Increase the temperature setting, it may be that the room is hotter than the temperature limit set.
Drymatic Wall and Floor System not inflating	1) Insufficient airflow	Try positioning the air mover closer to the Drymatic Boost Bar or use a higher speed setting. Check that the mat is well sealed around the Drymatic Boost Bar and free to inflate. The minimum recommended airflow of 650cfm (1100m ³ /hr) is the requirement for the Drymatic Boost Bar to function correctly. Inflating mats, depending on configuration, may require significantly more airflow.

In the event that this list does not cover your particular issue or the solution does not solve the problem please contact your local Drymatic representative.

Model Identification:

The model number and serial number on your machine can be used to identify your products type and more detailed power ratings from the specification table. This serial number can be found on the sticker above the handle on your machine.



Technical Specification:

Model	Standard Models (DBBA44XXXXXX)
Power Input	110-120Vac (60Hz)
Power Draw	1.4kW @ 50°F (10°C)
Fixed Power Cord Length	13' (4m)
Approvals	cULus (E472174)
Electrical Protection Class	I
Ingress Protection (EN60529)	IP20
Storage Temperature	-4°F to 122°F (-20°C to 50°C)
Ambient Operating Temperature	14°F to 122°F (-10°C to 50°C)*
Power Factor	1
Internal Electronic Components	3.3Vac
Control System	Electronic
Display	4.3" LCD Touch Screen
Max Air Temperature at Outlet	122°F (50°C)**
Duct Size	19 x 3" (470 x 80mm)
Housing	Polyethylene
Dimensions	27 x 12 x 8" (689 x 300 x 201mm)
Weight	16.8lb (7.6kg)

*Max temperature Drymatic Boost can be used in, it can then maintain this temperature of 122°F (50°C) if needed.

**Depending on airflow and mode selected. Maximum air temperature at outlet will be found when on the highest temperature setting with the lowest recommended operational airflow 650cfm (1100m³/hr) and restrictions (such as a small mat).

Drymatic Limited Warranty Card

Boost Bar Model Number FGPH Serial Number _____

Date of Purchase ___/___/___ Purchased From _____

Title _____ First Name _____ Last Name _____

Address _____

Phone (_____) _____ Email _____

Signature _____ Date ___/___/___

Warranty Information:

Please complete and mail, fax or email your warranty registration card complete with bill of sale/receipt to activate your warranty. DBK offers a standard two year comprehensive warranty from the date of purchase of Drymatic Boost Bar. Contact details can be found below. Please see the Model Identification section to locate your model and serial number.

DBK USA, Inc.

212 Northeast Drive, Spartanburg, SC 29303

Tel: 1 864 599 1600 Fax: 1 864 578 6464 Email: info-us@dbk-group.com

Web: www.dbkusa.com

An electronic version of this instruction manual is also available online via this QR code

