Climate RENTAL SOLUTIONS

DBK DRYMATIC BOOST BOX

INSTRUCTION MANUAL

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

OPERATION

Mode - "Boost For Drymatic"
Used to heat the air from an air-mover. In this mode the system can be used to boost the room air temperature when used in conjunction with a Drymatic. The air off temperature is limited to 30ºC (80°F) maximum.*

Mode - 'Aux Heater' - Auxiliary Room Heater
Used to heat the air from an air-mover. The air off temperature is limited to 60ºC (140°F) maximum.*

Mode - 'D.A.D' System - Direct Air Drying System Air Heater
Used to heat the air from an air-mover that is fed into a DAD system. The air off temperature is limited to 50ºC (122°F) maximum.*

Mode – 'Reset'
Erases kWh and hours run readings. Also removes the previous drying target set by the Dry-Reference Sensor.

*The limiting temperature may not be attained with high airflow.

Configuration:
- Position an air mover so that air is fed into the 'Drymatic Boost' it does not matter which direction, a fabric coupling may be used but this is not essential. **Warning: The air-mover outlet should be approximately the same size as the Drymatic Boost intake, using a smaller width fan could cause the thermal cut out to permanently activate. It is recommended that the fan be no more than 0.5m (19") from the Drymatic Boost intake. Recommended airflows greater than 800CFM (1360m³/hr).**
- Plug Air-mover into 'Fan Plug' using adapter supplied (Optional)
- Connect 'Fan Supply' to mains using lead supplied.
- Switch ON (|), switch will illuminate.
- Turn the switch to RESET. An "rst rst" message will be displayed once reset has been performed.
- Turn switch to the desired mode.
- A rotating graphic will be shown on the 'Hours' display, this will disappear once sufficient airflow is detected. This can take up to 60 seconds.
- In the event of lost airflow, the heater will switch off and the rotating graphic will be shown on the 'Hours' display, this can take up to 1 minute.

Note: A safety cut-out will operate if the unit is not placed with the displays parallel to the floor. The heater will be switched off and the no-airflow rotating graphic will appear on the hours run display.

- If sensors are to be used see 'Operation with Remote Sensors'

'OPERATION WITH REMOTE SENSORS'

Function:
The affected areas are compared to the Dry-Reference sensor. Once a sensor reading is comparable to the Dry-Reference continuously for 8 hours, the corresponding light will change from red to green. When all active sensors are showing green lights on the Drymatic Boost, the unit has completed drying and will switch off heater and Air-mover functions. To continue drying a RESET will need to be performed.

Configuration:

- Drill a 12.5mm (1/2”) hole in the wall/floor. (Ensure safe drilling practices are observed)
- Position conical rubber bung onto wall sensor probe.
- Firmly push activated sensor into wall. It will not insert completely.

If a yellow plastic wall/floor plug is being used:

- Remove knock outs from wall plug.
- Insert yellow plastic wall plug fully into wall.
- Remove conical rubber bung from wall sensor.
- Gently push wall sensor into plug. It will not insert completely.

Plug in a sensor to the connector marked ‘Dry Reference’. Place this sensor into unaffected material as near as possible to the affected area. Ensure the sensor has charged batteries; slide the switch to the ON position (towards the probe end). Note: when using a D.A.D system it is advisable to put the Dry Reference sensor under the mat in an unaffected area.

Plug in up to 3 other sensors. These are positioned in the affected area. Ensure the sensor has charged batteries; slide the switch to the ON position (towards the probe end). The green light on the sensor will flash to show that the sensor is functioning properly. The corresponding RED led on the Drymatic Boost will also illuminate (this can take up to 1 minute). If a sensor is removed the RED led will extinguish in 2 minutes, this sensor will then be disregarded unless plugged in again. This will also reset the 8 hours drying timer for that sensor.

Sensor Care:

Do not immerse in water.
Do not short circuit any of the internal metallic parts.
Only ‘AA’ batteries should be used.
Remove batteries if sensor is left unused for long periods.
Be careful not to bend any of the components on the circuit board.
Do not block the sensor hole at the end of the probe.

Battery replacement:

- Switch OFF the sensor.
- Unplug sensor cable.
- Unclip the battery cover.
- Remove the batteries. (Pushing down on the end of the battery will help it to come out easier).
- Insert new batteries (2 x ‘AA’). Please observe the battery orientations indicated on the sensor housing.
- Replace cover.

FEATURES

- The Drymatic Boost is bi-directional; air can be passed through in either direction.
- All sensors are identical so it does not matter which sockets are used, providing the Dry-Reference sensor is used.
- kWh, hours run and Dry-Reference level saved even if power removed.
- Low surface load prevents spirals glowing with reduced airflow.
- Automatic heater shut-off in the absence of airflow.
- Low profile probe type temperature and relative humidity sensors can be inserted into holes in floor, walls or in conjunction with a floor box.
- A safety cut-out will operate if the unit is not placed with the displays parallel to the floor. The heater will be switched off and the no airflow rotating graphic will appear on the hours run display.

WARNINGS

- Do not remove the control panel to expose internal wiring - never work on Live equipment.
- Do not block or restrict duct inlets or outlets.
- Do not remove adhesive labels.
- Do not attempt to run the system from any other supply than it is specified for, i.e., a 230V system from an 110V supply or vice versa.
- Do not use the system in standing water or where water can run or drip onto the unit.
- Do not position flammable materials in the vicinity of the heater outlet.
- Do not stack items or equipment on the unit.
- Do not use with worn electrical sockets, as the plug will become excessively hot.
- If a UK plug is fitted only use a 13Amp fuse.
- Only use the mains cord supplied with the product.
- This machine should be regularly Portable Appliance Tested (PAT).
- “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.
- Children should be supervised to ensure they do not play with the appliance
- The heater shall not be located directly beneath a socket.
- If extension leads are used ensure they have adequate electrical rating and are used in the correct manner (i.e. fully unwound).
- It is recommended that the system be run from a suitable RCD.
- Do not dispose of in domestic waste.
- In order to avoid overheating, do not cover the entire unit.
- Do not use in the immediate vicinity of a bath, shower or swimming pool.
- Do not use this equipment in small rooms when they are occupied by persons incapable of leaving the room on their own, unless constant supervision is provided.
- When using a D.A.D mat, care should be taken that if the fan is powered down the mat will not deflate and cover anything that could cause a hazard. Do not place cables in front of heater outlet.
- Not for use on building sites.

TROUBLESHOOTING

Problem: Displays are not lit but ON/OFF switch is illuminated.

1. Disconnect unit from mains supply.
2. The fuse holder located next to ON/OFF switch is un-screwed using a flat blade screwdriver.
3. Replace fuse (replace ONLY with a 6x32mm 12.5A (FF) 250V Ceramic fuse). Ensure that fuse holder is tightened.

If replacing the fuse does not remedy the problem, contact supplier.

Problem: ON/OFF switch is not illuminated and display not illuminated.

Disconnect unit from mains supply.

Check:

- Fuse in plug (U.K only).
- Mains outlet is functioning.
- Cable for breaks or cuts.

Problem: Unit not producing hot air.

Check:

- Adequate airflow. If rotating graphic shown in Hours display, there is insufficient airflow. Try positioning the fan

closer to the Drymatic Boost or using a fabric coupler.
- Ambient is not higher than the temperature range for the selected mode.
- Allow sufficient time for unit to heat up. Can take up to 5 minutes.
- A safety cut-out will operate if the unit is not placed with the displays parallel to the floor.

Problem: Fan not running.

Check:

- That the Fan Supply lead is connected and that power is available.
- If sensor lights that correspond to active sensors on the Drymatic Boost are green, then the unit has reached the Drying Target given by the Dry-Reference sensor and shut down to save energy. This is normal.
- The fan supply is only rated at 10Amps, excessive loading of this circuit will cause the fan fuse to blow. It is recommended that the load be kept below 5Amps.

Check: Fuse

4. Disconnect unit from mains supply (both Fan Supply and Mains Input).
5. The fuse holder located next to ON/OFF switch is released using a flat blade screwdriver.
6. Replace fuse (replace ONLY with a 5x20mm 10A (T) 250V Ceramic fuse). Ensure that fuse holder is fully inserted.

Problem: Green lights on Drymatic Boost illuminated 8 hours after starting even though affected areas still wet.

Check:

- That system has been RESET. The Dry-Reference reading from the first run may still be in memory.

TROUBLE SHOOTING – REMOTE SENSORS:

Problem: Sensor GREEN light not flashing.

Check:

- Batteries are inserted in the correct orientation.
- Batteries are not discharged.
- Switch is in the ON position.
- Sensor has not become water-logged.

Problem: Sensor GREEN light flashing, but no corresponding light on Drymatic Boost.

Check:

- Sensor cable fully inserted into socket at both ends.
- The Dry Reference Sensor is connected.
- Cable for breaks or cuts.
- Allow enough time, it can take up to a minute for the RED light to illuminate once the sensor has been plugged in.

TECHNICAL SPECIFICATION

Nominal Supply	230/240VAC (50/60Hz)
Electrical protection Class	I
Ingress protection (EN60529)	IP20
Storage Temperature	-20ºC to +50ºC (-4 to 122°F)
Operating Temperature	-10ºC to +40ºC (14 to 104°F)
Power drawn from mains (W) UK & Germany (230VAC) Australia / USA (240VAC)	2.05kW (7000BTU/hr) 2.3kW (7855BTU/hr)
Power Factor	1
Internal electronic components	5VDC
Control system	Electronic
Display	LED
kwh meter Accuracy	Class 1B
Thermal safety cut-out	109ºC Non-Resettable (228°F)
Max Air-off temperature	60ºC** (140°F)
Duct Connection	480x140mm (18.9”x 5.5”)
Fuse protection	6x32mm 12.5Amp (FF)
Fan Fuse protection	5x20mm 10Amp (T)
Supply connection	IEC320 (C20)
Enclosure	ABS (FR)
Dims (mm) cross section	240 x 550mm (9.45”x21.65”)
length	490mm (19.3”)
Sensor Accuracy	±0.3% ºC / ±1.5% RH
Sensor Power Supply	2x AA Cells
Sensor Wire Length (Max)	5m (16’5”)
Approx Weight (kg)	7.5 (16.5lb)

****Depending on airflow and mode selected.**