# SUPREME AIRJET



Installation & maintenance instructions.

#### **General Safety Information**

# WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- Failure to disconnect the power source before installation can result in serious injury or death from electric shock. Always disconnect the power source before servicing or installing the hand dryer.
- Fixed wiring is recommended for all installations. Wiring should emerge from the wall in the position marked on the mounting diagram. All fixed wiring should incorporate a switch or breaker with a contract separation of at least 3mm in all poles.
- SPL (2021) Ltd accepts no responsibility for any damage or injury to property or persons caused by improper, incorrect or unreasonable use or installation.
- Failure to properly ground this unit could result in severe electrical shock and/or death. This hand dryer must be properly grounded (Earthed) for safe operation. An identified ground connection point is supplied on the chassis of the hand dryer. We recommend GFCI protection in wet or damp locations or as required by local code.
- Risk of fire, personal injury or property damage are possible if local codes, or safety recommendations are not followed. Installation must be carried out by a qualified person in accordance with all local wiring regulations.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The instructions contained within the Mounting Template must be followed carefully when installing this unit. Failure to accurately follow the instructions may result in the incorrect operation of this unit, damage to property and/or personal injury.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Do not insert objects into the air outlet, doing so can be hazardous and could result in electric shock.
- Do not obstruct the air inlets or outlets in any way.
- Do service your hand dryer at regular intervals.

#### **Operating Instruction and Parts Manual**

Please read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage. Retain instructions for future reference.

#### Supreme AIRJET Hand Dryer

Supreme AIRJET hand dryer, is a surfaced-mounted dryer, powered by a universal brushed motor, delivering up to 950 watts of drying power. These models operate at all voltages 277VAC. The AIRJET incorporates an integrated heating element, selectable blower speed and infrared sensing for automatic activation. Your specific model may include a high efficiency particulate (HEPA) filter to remove a minimum of 99.97% of contaminants at 0.3 microns in size of larger. These models are intended for use in commercial, industrial, office and public facility environments.

#### **Specifications**

Cover Die Cast Aluminium White/ Brushed Stainless Steel

Motor Universal brushed vacuum type 3100 RPM

Power 950W High, 650W Medium, 450W Low, 4.1 amps

Element Nichrome wire construction 475W

Rating Universal Voltage - 120 - 277VAC, 50/60Hz, IP24

Switching Infrared sensor activation

Sound Levels High 69dBA, Medium 67dBA, Low 66dBA (@2m)

Max Airflow 71 m3/hour low speed - 108 m3/hour high speed

(@241km/h or 362km/h)

Dimensions 368H x 311W x 100D mm

Weight White 3.7kg / Brushed Stainless Steel 4.4kg

Warranty The Supreme Comprehensive Hand Dryer Warranty - 60

Month Limited Warranty

Standards Complies with New Zealand and Australian Standards

## **Planning**

We suggest that one hand dryer be installed for every two hand basins.

NOTE: Ensure that no reflective object (such as hand basin) is located directly under infra-red sensor eye; the minimum distance is 460mm.

#### Installation Instructions

- 1. Disconnect the power source
- 2. Use the security hex key supplied and turn the cover mounting screws clockwise to remove the cover from the dryer.
- 3. Place the hand dryer base on the wall at the desired location using recommended mounting height. Use the base as a template to mark locations of the four mounting bolt holes on the wall.
- 4. Fasten the base to the wall, using suitable fixings for the type of wall.
- 5. All automatic dryers must have their own dedicated 10 amp circuit.
- 6. Connect the dryer to the nearest suitable distribution panel.
- 7. Replace cover, turn screws counter-clockwise making certain not to over tighten.
- 8. Handover security hex key to property manager.

#### Recommended Mounting Heights

From Floor to Dryer Bottom Edge:

1100mm
1050mm
1000mm
950mm
900mm
800mm
950mm

NOTE: Dryer should not be installed within 460mm of a bench top or reflective surface.

#### Adjusting IR Sensor Distance

IR sensing distances for automatic Supreme AIRJET are factory set between 100 -150 mm. In some installation environments, sensing distance may need to be adjusted lower due to environmental conditions to eliminate unattended activation or ghosting. Installation close to a reflective surface, exposure to natural sunlight or other nearby IR activated devices can be conditions causing unattended activation. Lowering the IR sensor's sensing range / sensitivity can resolve this. To adjust the IR sensing range, remove the cover and locate the blue trimmer pot on the control board as shown in FIG 1.

These instructions involve adjusting the IR sensor trimmer POT with the power connected (live) to the hand dryer. The trimmer POT is located in a low voltage area of the electronic controls, but there is hazardous live voltage in other areas of the dryer when the cover is removed. Be careful making adjustments, if you are not experienced making this kind of "live" adjustment, do not attempt to make the adjustment.

#### Instructions for adjustment:

To establish the initial sensing distance setting, place palm flat and horizontal well below the hand dryer; starting at a point where the dryer will not activate. Slowly move upward towards the dryer until the dryer activates and will sustain operation. Note the approximate distance between your palm and the bottom of the hand dryer. Adjusting the screw clockwise will increase the sensing distance / sensitivity; adjusting the screw counter-clockwise will reduce sensing distance / sensitivity. The trimmer POT has a high resolution adjustment. 20 to 40 degrees adjustment of the screw (from 3 o'clock position to 1 o'clock position) may be all that is needed for adequate adjustment. To eliminate unattended activation /ghosting, adjust the trimmer POT screw counter-clockwise 20 - 40 degrees and recheck sensing distance and repeat, as necessary, to reduce the sensing distance to a comfortable activation point that resolves the issue.

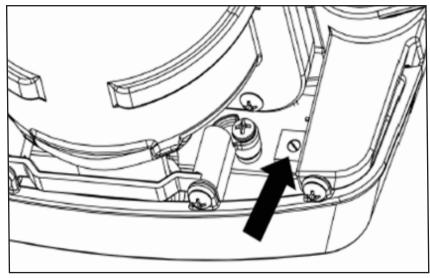


FIG 1

## **Adjusting Blower Speed**

These models include adjustable blower speed control for (3) levels of operation - Hi, Med and Low. The switch is located on the printed circuit board inside the dryer as shown in FIG 2.

The factory setting for blower speed control is "Hi".

To adjust blower speed:

- 1. Disconnect the power source.
- Use the security hex key supplied to turn the cover mounting screws clockwise to remove the cover from the dryer.
- 3. Locate the switch on the printed circuit board inside the dryer as shown in FIG 2 and adjust blower speed as desired. (Note: When Med or Low speed is selected, LED 3 on the printed circuit board will be lit). Reassemble the dryer cover using the security hex key supplied to turn the cover mounting screws counter-clockwise and tighten until snug. Do not over tighten.



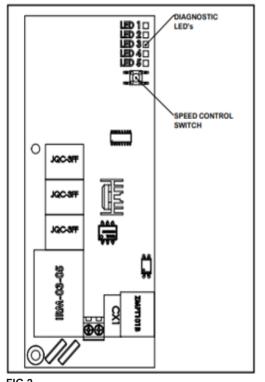


FIG 2

## **Accent Lighting**

The dryer's accent lighting can be adjusted to operate continuously or only when the dryer is activated for drying hands (default factory setting). Most energy efficient operation is with the default factory setting. To change the lighting mode, press the light mode switch shown in Fig. 3

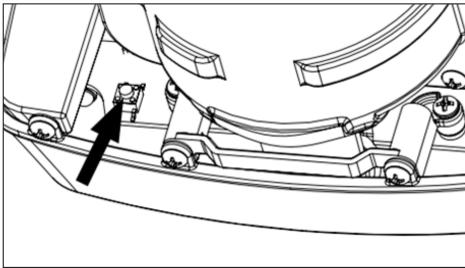


FIG 3

## Maintenance and Cleaning Instruction

IMPORTANT: The dryer may collect lint and debris that is naturally present in the air. Excessive build up of lint and debris can damage the motor and heating element. The dryer should be cleaned on a routine schedule to maintain the dryer in good operating condition with light to moderate wash room traffic, cleaning once a year is recommended. If wash room traffic is high, cleaning every 6 months is recommended.

#### Instructions on how to clean the hand dryer:

- 1. Isolate the dryer either by turning off the switch, normally located above the dryer or by unplugging the unit if fitted with a power cord.
- 2. Use the security hex key supplied to turn the cover mounting screws clockwise to remove the cover from the dryer.
- 3. Remove HEPA filter and replace with a new one (see detailed instructions below). To order replacement filter to go www.splwashrooms.co.nz and search for consumables.
- 4. Use a soft-medium bristle paint brush to clean lint, dust and debris from the air intake slots, and the motor's exterior.
- 5. After cleaning, reassemble the dryer cover using the security hex key supplied to turn the cover mounting screws counter-clockwise and tighten until snug. Do not over tighten.

#### Diagnostic LED Display

The printed circuit board includes a set of LED's that indicate the operational status of the hand dryer. When contacting SPL Technical Service, be prepared to remove the dryer's cover and provide the condition of the LED's as they can be helpful in troubleshooting the dryer. See the table below for an explanation of LED function.

Error	IR Sensor	Speed Setting	Power Supply		Indication
LED 5	LED 4	LED 3	LED 2	LED 1	
Flashing					Voltage outside of normal range
			ON	ON	Detected supply voltage is 120V
			ON	OFF	Detected supply voltage is 208V
			OFF	ON	Detected supply voltage is 240V
			OFF	OFF	Detected supply voltage is 277V
		ON			Blower speed is set at Med or Low
		OFF			Blower speed is ser at Hi (default)

## **HEPA Filter Replacement**

High efficiency particulate absorbtion (HEPA) filters remove a minimum of 99.97% of contaminants 0.3 microns in size or larger.

The service life of a HEPA filter depends on the environment in which the dryer is installed and frequency of use. High traffic washrooms or high usage will require more frequent inspection and replacement of the HEPA filter. When visual inspection of the HEPA filter shows excessive buildup of lint, dust and debris, the filter should be replaced.

Examining and changing a HEPA filter regularly keeps hand dryers working efficiently. Operating a hand dryer with an excessively dirty or clogged filter can damage your machine.

The HEPA filter cannot be cleaned and re-used. Do not clean the HEPA filter or allow it to come into contact with water.

To reorder go to www.splwashrooms.co.nz and search for consumables.

To inspect or replace the HEPA filter:

- 1. Isolate the dryer either by turning off the switch, normally located above the dryer or by unplugging the unit if fitted with a power cord.
- 2. Use the security hex key supplied to turn the cover mounting screws clockwise to remove the cover from the dryer.
- 3. Removing and replacing the HEPA filter is easily done by sliding the filter in its mounting track on the motor cap.
- 4. After replacing the HEPA filter, reassemble the dryer cover using the security hex key supplied to turn the cover mounting screws counterclockwise and tighten until snug. Do not over tighten.
- 5. Reconnect the power source.



#### Register your Hand Dryer

Scan the QR code using the camera app on your smart phone.

Upon registering you will receive a 5% discount code for your first online order and we will send you one annual maintenance reminder email.

## Troubleshooting

Symptom	Possible Cause	Corrective Action
Dryer fails to start	Incoming power supply	Remove cover and check diagnostic LEDs. If no LED's are lit, check power supply at the circuit breaker/ fuse.
	Defective PCB	If no LED's are lit above and supply circuit is confirmed to be active, replace PCB and transformer.
	Sensor obstruction	If LED 5 is lit or flashing (green) without hands under the sensor, check sensor lens for foreign material or dirt. Clean lens with soft damp cloth and mild cleaning agent.
	Defective sensor operation	If LED 5 does not light when hands are under sensor, replace PCB and sensor.
	Motor brushes at end of service life	Check motor brushes and replace if necessary.
	Defective heating element (Important: applies when connected to 208 - 240V power supply)	If dryer is connected to 208 - 240V power supply and all other possible causes have been checked, replace the heating element.
Dryer too loud	Dryer speed setting	Adjust blower speed to "Low". When operating at low speed, LED 4 will light (blue) when hands are under sensor.
Air temperature is too cold. The dryer's heating fluctuates/ goes "on" and "off" during a drying cycle. The dryer speed fluctuates up and down during a drying cycle.	Defective heating element. (Important: Applies only when connected to 120V power supply.)	Replace heating element.
Dryer will only run a few seconds and then	Motor brushes at end of service life.	Check motor brushes and replace if necessary.
stops. Dryer will not activate every time. Arcing sounds during operation. Funny smell (ozone) during operation.	Defective heating element ( <b>Important</b> : Applies only when connected to 208 - 240V power supply.)	Replace heating element.

#### Supreme Hand Dryer Limited Warranty

Your Supreme hand dryer is fully guaranteed against defective materials and faulty workmanship commencing from the date of sale (according to SPL's records), subject to it being installed and maintained in accordance with the manufacturer's instructions.

SPL (2021) Limited warrants that should any part of the dryer fail within the given warranty period (2- 5 years product dependant), it will be remedied by SPL.

The dryer should be returned to SPL (2021) Limited for all warranty claims. The cost of cartage will be payable by the customer.

Due to the significant variation in tradesmen's knowledge, experience, and productivity, labour charges will NOT be accepted unconditionally. We strongly recommend contacting our office for advice before proceeding with any warranty repairs.

#### This warranty excludes:

- Incorrect installation, or installation that does not specifically follow the installation guidelines supplied
- Defects arising from improper installation, or incorrect electrical supply where applicable
- Failure to follow manufacturer's maintenance instructions
- Damage/Failure resulting from:
  - the use of non-authorised parts
  - authorised parts not installed in accordance with the manufacturer's instructions
  - accidental damage, negligent use, misuse, vandalism, neglect
  - damage caused either directly or indirectly by external sources (power outages, power surges, incorrect power supply, natural disaster, or insect infestation)
- Water ingress caused by property maintenance or flooding
- Negligent cleaning practices (water ingress, harmful chemical etc)

The above includes consequential damage to any other goods, furnishings, or property.

- Normal wear and tear and consumable parts (HEPA filters, UV-C lamps, fuses, motor brushes etc)
- This warranty does not displace any statutory warranty in relation to the dryer but any liability of SPL (2021) Limited under any statutory warranty will be limited to a replacement or repair of the dryer or payment of the cost of such replacement or repair at the sole discretion of SPL (2021) Limited

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