

**UNIMAC**



## 3M2 Drywall Sander

### User Manual

[Revision 3.0 May 2018]

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READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

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# Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

 You WILL be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be INJURED if you do not follow instructions or equipment damage may occur.
<p>It is vital that you read and understand this user manual before using the product, including safety warnings, and any assembly and operating instructions. Keep the manual for future reference.</p> <p>Safety precautions and recommendations detailed here must be fully understood and followed to reduce the risk of injury, fire, explosion, electrical hazard, and/or property damage.</p> <p>Safety information presented here is generic in nature – some advice may not be applicable to every product. The term "equipment" refers to the product, be it electrical mains powered, battery powered or combustion engine powered.</p> <ul style="list-style-type: none"> <li><b>Before Use</b> - If you are not familiar with the safe operation/handling of the equipment, or are in any way unsure of any aspect of suitability or correct use for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling/safety.</li> <li>Do NOT operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. The equipment may create sparks or heat that may ignite flammable substances.</li> <li>Keep clear of moving parts.</li> <li>Equipment may be a potential source of electric shock or injury if misused.</li> <li>Do NOT operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.</li> <li>Do NOT allow others to use the equipment unless they have read this manual and are adequately trained.</li> <li>Keep packaging away from children – risk of suffocation!</li> <li>Operators must use the equipment correctly, consider conditions and pay due care to persons and property.</li> <li>Ensure that any property that may be damaged by equipment failure is not within the work area / operating range.</li> </ul>	<p><b>General Personal Safety</b></p> <ul style="list-style-type: none"> <li>Wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from eye and ear injury, poisoning, burns, cutting and crush injuries. Protective equipment such as safety goggles, respirators, non-slip safety footwear, hard hat, hearing protection etc should be used for appropriate equipment / conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.</li> <li>Stay alert and use common sense when operating the equipment. Do not over-reach. Always maintain secure footing and balance.</li> <li>Do not use the equipment if tired or under the influence of drugs, alcohol or medication.</li> <li>This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.</li> </ul> <p><b>General Fuel Safety</b></p> <ul style="list-style-type: none"> <li>Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources.</li> <li>Do not spill fuel. If you spill fuel, wipe it off the equipment immediately – if fuel gets on your clothing, change clothing.</li> <li>Do NOT smoke near fuel or when refuelling.</li> <li>Always shut off the engine before refuelling.</li> <li>Do NOT refuel a hot engine.</li> <li>Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly.</li> <li>Always refuel in well ventilated areas.</li> <li>Always check for fuel leakage. If fuel leakage is found, do not start or run the engine until all leaks are fixed.</li> </ul> <p><b>General Work Area Safety</b></p> <ul style="list-style-type: none"> <li>Work areas should be clean and well lit.</li> <li>Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.</li> <li>If devices are provided for connecting dust extraction / collection facilities, ensure these are connected and used properly. Dust collection can reduce dust-related hazards.</li> </ul>	<p><b>General Equipment Use and Care</b></p> <ul style="list-style-type: none"> <li>The equipment is designed for domestic use only.</li> <li>Handle the equipment safely and carefully.</li> <li>Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorised service centre or technician before use.</li> <li>Prevent unintentional starting of the equipment - ensure equipment and power switches are in the OFF position before connecting or moving equipment. Do not carry equipment with hands or fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.</li> <li>Do not force the equipment. Use the correct equipment for your application. Equipment will perform better and be safer when used within its design and usage parameters.</li> <li>Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.</li> <li>Always keep equipment components (engines, hoses, handles, controls, frames, housings, guards etc) and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment clean and, where applicable, properly lubricated.</li> <li>Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place or store the equipment near flammable materials, combustible gases or liquids etc.</li> <li>The equipment is not weather-proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or humid.</li> <li>Do not clean equipment with solvents, flammable liquids or harsh abrasives.</li> <li>For specific equipment safety use and care, see <a href="#">Equipment Safety</a>.</li> </ul>

**General Battery and Charging Safety**

- Use only with the batteries and battery charger specified by the manufacturer.
- When battery is charged, disconnect the charger from the power supply and remove the battery from the charger.
- Batteries can explode in the presence of an ignition source, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. Exploding batteries can propel debris and chemicals.
- Do not use the charger in wet areas or expose it to rain or water.
- Do not open the battery – danger of short-circuiting and/or explosion.
- Do not attempt to destroy or disassemble the battery pack or remove any of its components.
- Do not touch the battery terminals with metal objects and/or body parts as short-circuit and/or personal injury may result.
- Explosion hazard – protect the battery against heat; for example, direct sunlight and fire. Do not store batteries in vehicles or locations subject to heat.
- Explosion hazard – do not open and/or short-circuit the battery.
- Poison hazard – battery leakage (liquid ejection). Under extreme conditions, liquid may be ejected from the battery – avoid contact. If contact accidentally occurs, immediately seek medical attention, and flush with water. If liquid contacts eyes, immediately seek medical attention, flush with clean water for at least 10 minutes. Liquid ejected from the battery may cause irritation or burns.
- Ensure that the battery charger electrical cord is not subjected to damage or stress. Do not operate the battery charger if it has a damaged electrical cord or plug.
- For best results, charge batteries in temperatures between 7°C (45°F) and 40°C (104°F).
- Dispose of non-serviceable batteries in an environmentally responsible manner and according to local regulations.

**General Electrical Safety**

- Inspect electrical equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Repair or replace damaged equipment immediately.
- Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting or disconnecting equipment.
- When wiring electrically powered equipment, follow all electrical and safety codes.
- Wherever possible, use a residual current device (RCD).
- High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.
- Electrically grounded equipment must have an approved cord and plug and be connected to a grounded electrical outlet.
- Do NOT bypass the ON/OFF switch and operate equipment by connecting and disconnecting the electrical cord.
- Do NOT use equipment that has exposed wiring, damaged switches, covers or guards.
- Do NOT use electrical equipment in wet conditions or in damp locations.
- Do NOT use electrical cords to lift, move or carry equipment.
- Do NOT coil or knot electrical cords, and ensure electrical cords are not trip hazards.

**General Service Information**

- The equipment must be serviced or repaired at authorised service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to ensure equipment safety is maintained.
- Do NOT attempt any maintenance or repair work not described in this manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance.
- Do NOT make adjustments while the equipment is running.
- Perform service related activities in suitable conditions, such as a workshop.
- Replace worn, damaged or missing warning/safety labels immediately.

## Safety Symbols

The product may have safety warning labels attached to it, explained below. Understand the symbols on your product and their meanings. If any stickers become unreadable, unattached etc, replace them.

 <p><b>Flammable Material Hazard</b> Flammable liquids, gases or substances etc may present. Avoid ignition sources and open flames. Danger of fire.</p>	 <p><b>Read User Manual</b> Read and fully understand product safety warnings, operation, procedures etc before using the product.</p>	 <p><b>Use Hand Protection</b> Wear appropriate hand protection and take due care as the product or use of the product may present hand hazards.</p>	 <p><b>WARNING EXHAUST FUMES</b> <b>Carbon-Monoxide Hazard</b> Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.</p>
 <p><b>Electrocution / Electrical Shock Hazard</b> High voltage or high current electricity may be present or required by the product. Take due care when handling electrical products, cables, plugs and leads. Electrical shock can be fatal.</p>	 <p><b>Toxic Fumes hazard</b> Using the product or by-products from use may produce fumes, smoke or particles that could be harmful if inhaled. Wear appropriate breathing protection and have adequate ventilation.</p>	 <p><b>Explosive Material Hazard</b> Combustible liquids, gases or substances etc may be present. Avoid ignition sources and open flames. Danger of explosion.</p>	 <p><b>Cutting / Amputation Hazard</b> The product may have blades, edges or mechanical devices that can cause severe cut injury to fingers, limbs etc. Take due care when handling and using the product.</p>
 <p><b>Crush Hazard</b> The product may have blades, edges or mechanical devices that can cause severe crush injury to fingers, limbs etc. Take due care when handling and using the product.</p>	 <p><b>Single Operator Only</b> The product must be operated by a single person only. More than one person operating the product may introduce additional hazards.</p>	 <p><b>Use Face Protection</b> Wear appropriate full-face protection and take due care as the product or use of the product may present face and eye hazards.</p>	 <p><b>Use Foot Protection</b> Wear appropriate foot protection and take due care as the product or use of the product may present foot hazards.</p>
 <p><b>Use Eye / Ear / Head Protection</b> Wear appropriate eye and / or ear and / or head protection and take due care as the product or use of the product may present eye, hearing and head hazards.</p>	 <p><b>Running Hazard</b> Do not run on or near the product as doing so may present a fall hazard.</p>	 <p><b>Diving Hazard</b> Do not dive into the product as doing so may present a neck / head injury hazard.</p>	 <p><b>Adult Supervision Required</b> Always supervise children and other users of a product to prevent drowning or injury.</p>
 <p><b>Skin Penetration / Puncture Hazard</b> The product may produce pressure, emit liquids or objects that can cause severe injury to fingers, limbs, blood etc. Take due care when handling and using the product.</p>	 <p><b>Hot Surface Hazard</b> Be aware that the product may produce high temperatures and hot surfaces that can cause burn injuries.</p>	 <p><b>Flying Debris Hazard</b> Be aware that the product or use of the product may present hazards produced by flying debris. Wear appropriate clothing and protective devices.</p>	 <p><b>Moving Parts Hazard</b> Be aware that the product contains or uses mechanical devices that move or rotate. Always wait for moving parts to stop fully before handling the product, adjusting, maintenance etc.</p>

			
<b>Carbon-Monoxide Hazard</b> Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.	<b>Pull Hazard</b> Be aware that the product contains or uses mechanical devices that can pull in objects and can cause severe injury to fingers, limbs etc. Take due care when handling and using the product.	<b>Slope / Fall Injury Hazard</b> Be aware that using the product on sloping surfaces or in slippery conditions may present additional dangers from falls and contact with blades, moving parts, hot surfaces etc.	<b>"Slam Dunk" Warning</b> Do NOT attempt "slam dunk" manoeuvres as this may result in severe injury due to falling, product breakage or collapse etc.
			
<b>Electrocution / Electrical Shock Hazard - Outdoor</b> High voltage or high current electricity may be present or required by the product. Do NOT use in rain, damp or wet conditions. Electrical shock can be fatal.	<b>Electrocution / Electrical Shock Hazard - Disconnect</b> High voltage or high current electricity may be present or required by the product. Always disconnect the product from the electrical supply before handling the product, adjusting, maintenance etc.	<b>Power Line Electrocution Hazard</b> High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.	<b>"Kick-Back" Hazard</b> High level of "kick-back" hazard that can cause the machine to suddenly rotate towards operator. Kick-back injury can be fatal.
			
<b>Winch Operator Position Hazard</b> Do NOT stand between winch and load. Do NOT use winch to move people.	<b>Winch Lift Hazard</b> Do NOT LIFT load vertically. Use machine to PULL only.	<b>Cable Hazard</b> Ensure that load bearing cable is not kinked or knotted.	<b>Winch Cable Hazard</b> Ensure that there is a minimum number of cable coils on winching mechanism.
			
<b>Winch Hook Hazard</b> Carry hook to load – do NOT throw or run.	<b>Flash / Blinding Hazard</b> Wear appropriate eye protection for welding. Direct exposure to weld arcs may cause permanent eye injury.	<b>Laser Hazard</b> Laser may be in use – do NOT look directly at laser, or allow others to.	<b>Corrosive Substance Hazard</b> The product may contain corrosive substances that can harm or otherwise cause damage. Take due care when handling and using the product.
			
<b>Explosion Hazard</b> The product may contain substances that can explode under certain conditions or misuse. Take due care when handling and using the product.			

# Equipment Safety



Electrically powered sanding equipment can cause serious or fatal injury if not used correctly or without taking proper safety precautions. **It is extremely important that you read and fully understand the information in this section and all other safety warnings / recommendations and usage instructions before using the equipment.** • Do NOT sand lead-based paints or materials containing asbestos – have these removed by specialists.

## Operator

- If you are untrained in the use of an electrically powered sander, it is highly recommended that you be trained/instructed by a suitably qualified or experienced user before using the tool.
- Fully understand how to safely operate the tool for best performance and to avoid hazards. See Operation.
- NEVER operate the tool when tired, or under the influence of any substance (medication, alcohol, drugs etc) that may impair your judgement, alertness, physical strength, vision or dexterity.
- Maintain sure-footing and balance always when using or handling the tool and have full awareness of your surroundings and any possible hazards.
- Prolonged use may lead to health complications, such as carpal tunnel syndrome, due to vibration. To help reduce the possibility of such conditions, wear gloves, take breaks frequently, keep fingers and hands warm, and maintain the equipment for optimal operation and minimal vibration. It is recommended to seek medical advice if you feel numbness or burning sensations in fingers/hands.

## Clothing and Protective Equipment – All Operators and Assistants

- Wear an approved dust mask / respirator. P2 masks with a AS1716:2003 approval are recommended.
- Wear approved safety goggles and hearing protection.
- Wear heavy-duty, non-slip leather or protective gloves.
- Wear approved heavy-duty safety boots, with steel toe-caps and non-slip soles.

## Work Area Safety

- Ensure that adequate ventilation is provided.
- A dust extraction system is recommended.

## Operational Safety

- Do NOT use the machine if the trigger or any safety guard or mechanism is not installed or is not operating correctly – have the machine inspected and repaired at an authorised service centre before using it again.
- Ensure the tool is electrically grounded.
- Do NOT use the machine for purposes it is not designed for.

## Transportation Safety

- Always STOP the tool and disconnect it from the electrical supply before transporting or working on it.
- Empty the dust bag (if equipped) before transporting the tool.

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# Parts Identification



No.	Name	No.	Name
1	Tool (includes controls, handles, sanding head, motor etc)	4	Tools / Accessories: Screwdriver Allen Key Depth Ring (2) Vacuum Tube Adaptor Carbon Brush (spares, may be supplied) Sanding Discs (may be supplied)
2	Dust Bag		
3	Dust Extraction Tube		

# Set-Up

## Disc Selection

The tool may come supplied with a selection of sanding discs (80 / 100 / 120 / 150 / 180 / 240 grit). These are suitable for most applications.

Sanding disc grit values determine how quickly material can be removed and the subsequent smoothness of finish. Lower grade values are "coarser", remove material more quickly but leave a rougher surface finish. Higher grade values are "finer", take longer to remove material but leave a smoother surface finish.

Use a disc appropriate to the task. For example, to quickly remove old paint, use a coarser grade. When preparing a surface for painting and finishing, use a finer grade.

## Installing and Replacing Discs



Disconnect the tool from the electrical supply before installing or replacing discs. • Do NOT use the tool without a sanding disc installed. • Use only sanding discs suited to the tool.

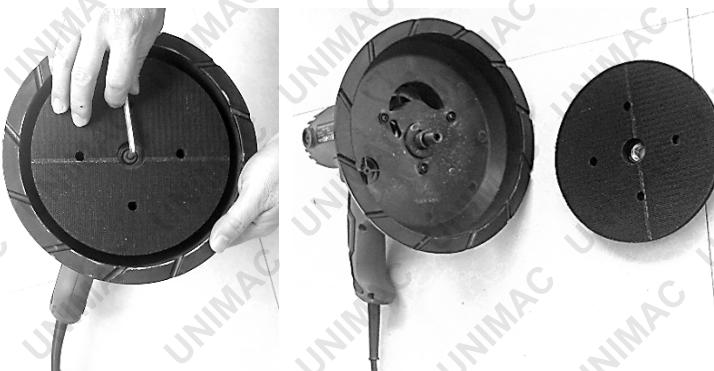
The sanding disc attaches to the disc pad by Velcro. Before installing a new disc, clean away all particles, dirt etc from the disc pad using a soft brush. To remove a sanding disc, lift and edge then "peel" it off the disc pad.

Install the disc by pressing it firmly on to the disc pad. Ensure that the disc is installed centrally to the disc pad.



## Installing and Replacing the Disc Pad

If necessary, the disc pad can be removed and replaced. To remove the disc pad, grip it firmly to prevent it rotating, then use an Allen key to loosen the fastening screw at the centre of the pad. The screw is "left-hand" thread, which means you must rotate it clockwise to unscrew. Replace the disc pad by reversing the removal procedure.



## Connecting the Dust Collection Bag



Always use the dust collection bag to help limit airborned dust particles in the work area.

Connect the dust collection bag (A) to the hose (B), then, if required, connect the hose to the tool dust port (C) and secure using the hose clamp.



## Operation

### Starting and Stopping the Tool

Ensure that the tool is OFF, then connect the tool to a 240VAC mains electrical supply.

Squeeze the trigger (E) to activate the tool. Release the trigger to stop the tool. To keep the tool running, squeeze and hold the trigger, then press the lock-on button (F). Squeeze then release the trigger to deactivate the lock-on button and stop the tool.



## Sanding



Do not allow the sanding disc pad to contact any sharp protrusions. Contact with protruding objects such as nails, screws, etc, can damage the sanding disc and / or disc pad. • The handle can be used on either side of the tool – whatever is most comfortable.

The drywall sander has an elliptical action, which helps to provide an improved sanding action on various surfaces and contours and helps reduce "digging-in" and uneven finishes.

- Start the tool.
- Position the sanding disc lightly against the work surface and apply sufficient pressure so that it has full contact with the work surface.
- Apply additional pressure to engage the abrasive action while moving the tool in overlapping circular patterns to smooth down the surface to a "feathered edge". Apply only enough pressure to keep the abrasive pad flat against the work surface. Excessive pressure can cause unsightly swirl marks and unevenness on the work surface.



- Keep the tool in constant motion while the sanding disc is in contact with the work surface. Use a steady, sweeping motion. Stopping the tool whilst in contact with the work surface or moving the tool erratically can cause unsightly swirl marks and unevenness on the work surface.

## Sanding Speed Adjustment

The disc rotation speed can be adjusted for different disc types and materials to be sanded. Adjust disc speed by rotating the speed control knob (G), where "1" is the slowest speed (approximately 1200 RPM) and "MAX" is fastest (approximately 1850 RPM).

Use higher speed settings for fast removal, while lower speed settings are suitable for more precise control and material removal.



## Corner Sanding

For corner sanding, loosen the 2 screws securing the front section of the disc guard (H) using a Phillips head screwdriver, then pull the section form the tool. This enables you to sand deep into corners.

To re-install the front section, slide the tabs on the front section into the slots at the front of the tool guard, then tighten the 2 screws (do not over-tighten).



## Changing Depth

If required, the depth of the disc pad can be changed, effectively lowering the sanding disc further from the tool body. This may be useful when sanding very uneven surfaces, for example. To change depth, remove the disc pad, then place 1 or 2 of the supplied spacing rings over the tool output shaft, then re-install the disc pad.



# Maintenance

- Clean the tool after each use. Brush off dust particles etc from it. Do not clean the tool using liquids, solvents, harsh detergents or abrasives
- Ensure that all ventilation slots are not blocked, and that all controls operate smoothly.

## Carbon Brush Replacement

If the tool motor stops operating, is rough or lacks power, the carbon brushes may be worn. Always replace both brushes. Spare carbon brushes may come supplied with the tool. To replace the brushes:

1. Use a Phillips head screwdriver to remove (rotate left) the brush covers on either side of the motor.
2. Use a screwdriver or other object to move the pressure spring and wire terminal away from the top of each brush. Remove the worn carbon brushes.
3. Insert the replacement carbon brushes into the brush cavities.
4. Place the wire terminal on top of each brush, then secure them in position using the pressure springs.
5. Re-install the brush covers and tighten (rotate right).



## Specifications

<b>Electrical Requirements</b>	240VAC / 50Hz
<b>Speed</b>	1200 to 1850 RPM (6 settings)
<b>Disc Size</b>	225mm with Velcro attachment
<b>Net weight</b>	2.8kgs
<b>Dust Bag Capacity</b>	20 litres
<b>Hose Length</b>	2 metres



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.



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