

DRAPER[®]

EN

Version 3
September 2022

230V

TRI-BASE SANDER

57681



UK
CA CE

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

All photographs and drawings within this manual are supplied by Draper Tools to help illustrate correct operation of the product.

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: 230V Tri-Base Sander

Stock No: 57681

Part No: TPS220D

1.2 Revisions

Version 1: November 2018
First release

Version 2: August 2020
Formatting updates

Version 3: September 2022
General content updates

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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3. Warranty

Draper Tools products are carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Contact information can be found at the back of this manual.

Proof of purchase must be provided.

If, upon inspection, it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covers parts and labour for 24 months from the date of purchase. Where tools have been hired out, the warranty period covers 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper Tools repair agent.

In all cases, to make a claim for faulty workmanship or materials within the standard warranty period, please contact or return the product to the place of purchase. Proof of purchase may be required.

If the place of purchase is no longer trading or if you experience any difficulties with your warranty, please contact Customer Services with the product details and your proof of purchase. Contact details can be found at the back of this manual.

If the tool is not covered by the terms of this warranty, repairs and carriage charges will be quoted and charged accordingly.

This warranty supersedes any other guarantees expressed or implied and variations of its terms are not authorised.

Your Draper Tools guarantee is not effective until you can produce, upon request, a dated receipt or invoice to verify your purchase within the guarantee period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

Draper Tools Limited

4.1 Scope

This product is a cordless orbital sander with an integrated dust collector assembly and is designed for finer sanding operations in corners and other areas that are difficult to access. It is suitable for light- to medium-duty sanding of wood and similar materials **ONLY**. The tool can be used with its integrated dust collector assembly or connected to a dust extraction unit. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Part of our core range, this product is suitable for regular use by enthusiasts and tradespersons alike.



WARNING! This product is not a toy and must be respected.

Read this manual in full before attempting to assemble, operate or maintain the product and retain it for later use.

4.2 Specification

Stock No.	57681
Part No.	TPS220D
Rated voltage:	230V AC
Rated frequency:	50Hz
Rated input:	220W
No-load speed:	13,000rpm
Base plate/sheet sizes:	
Palm (integrated) sheet:	L 102 x 62 x 93mm
Detail (medium) sheet:	L 93 x 93mm
Finger (narrow) sheet:	L 32 x 92mm
Sound emissions:	
Sound pressure level:	75dB(A)
Sound power level:	86dB(A)
Uncertainty:	3dB(A)
Vibrations:	
Vibration level:	9.6m/s ²
Uncertainty:	1.5m/s ²
Weight:	1.26kg
Appliance class:	Class II

Important: The declared vibration total values and noise emissions values have been measured in accordance with a standard test method and may be used for comparing one tool with another. These values may also be used in a preliminary assessment of exposure.



WARNING! The vibration and noise emissions during actual use of the product can differ from the declared values depending on the mode selected and the workpiece upon which it is used. Before each use, estimate the likely exposure resulting from the actual conditions of use. Take into account all parts of the operation cycle in order to identify any safety measures required to protect the operator.

5. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Non-compliance with these instructions may result in injury or damage to the user or the product.

5.1 General Power Tool Safety Warnings



WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- Keep work area clean and well lit.
 - Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
 - Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool.
 - Distractions can cause you to lose control.

Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.
- Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.
 - There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions.
 - Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.
 - Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use.

- Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.
 - Use of an RCD reduces the risk of electric shock.

Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.
 - A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.
 - Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection use for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to a power source and/or battery pack, picking up or carrying the tool.
 - Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on.
 - wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times.
 - This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.
 - Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.
 - Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.
- A careless action can cause severe injury within a fraction of a second.

Power tool use and care

- Do not force the power tool. Use the correct power tool for your application.
 - The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off.
 - Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories or storing power tools.
 - Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.
 - Power tools are dangerous in the hands of untrained users.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.
 - Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean.
 - Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits, etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.
 - Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease.
 - Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts.
 - This will ensure that the safety of the power tool is maintained.

5.2 Additional Safety Information for This Sander

Important: ALWAYS read and adhere to the workpiece supplier's safety data when performing sanding operations.

- **DO NOT** cover or otherwise obstruct the air vents during operation.
 - Ensure that the air vents are kept clear of dust and debris and clean the product regularly.
- Sanding operations on some woods, paint coatings and other materials may result in exposure to hazardous or carcinogenic dust particles.
 - If you are in any doubt about the risks of operating on the workpiece, seek advice from a qualified professional.
 - Ensure that bystanders are also equipped with suitable protective equipment during operation.
- When operating on workpieces that produce fine wood dust, a mask rated at least to FFP2 should be worn at all times during operation.
 - The work environment must be kept well ventilated, with appropriate dust extraction systems in place.
- **NEVER** leave this product unattended while it is switched on.
- This product is suitable for dry sanding operations **ONLY**; keep this product away from water and **DO NOT** use water in sanding operations with this tool.
- Wear hearing protection during operation of this tool.
- Where possible, ensure that the workpiece is firmly clamped or secured into place during operation.
 - This product is designed for hand-held use; **DO NOT** clamp the tool into position.
- **ALWAYS** ensure that the workpiece is free from nails, screws and other obstructions that may damage the sander.
- Extended use may result in injury from vibrations if the operation is not planned and managed correctly.



WARNING! The sanding sheet and the affected area of the workpiece become very hot during operation. ALWAYS allow the workpiece and sanding sheet to cool thoroughly before handling or adjusting them.

5. Health and Safety Information

5.3 Connection to the Power Supply

This appliance is supplied with an approved plug and cable for your safety.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when cut from the cable, shall be disabled to prevent connection to a live electrical outlet.

This product is a Class II* appliance and is designed for connection **ONLY** to a power supply matching that detailed on the rating label and compatible with the plug fitted.

The fuse in the plug can be replaced by removing the plug cover using a PH-type screwdriver and replacing the fuse in its holder.

If an extension lead is required, use an approved and compatible lead rated for this appliance.

Follow all the instructions supplied with the extension lead.

***Double insulated:** This product is double insulated and does not require an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

Important: Always follow the extension lead instructions regarding maximum load while the cable is wound. If in doubt, unwind the entire cable. A coiled extension lead generates heat which could melt the lead and cause a fire.

5.4 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

6.1 Product Overview



- (1) Base plate mount
- (2) Dust box
- (3) Dust collector assembly
- (4) Filter
- (5) Hand grips
- (6) LED lamp
- (7) Off button

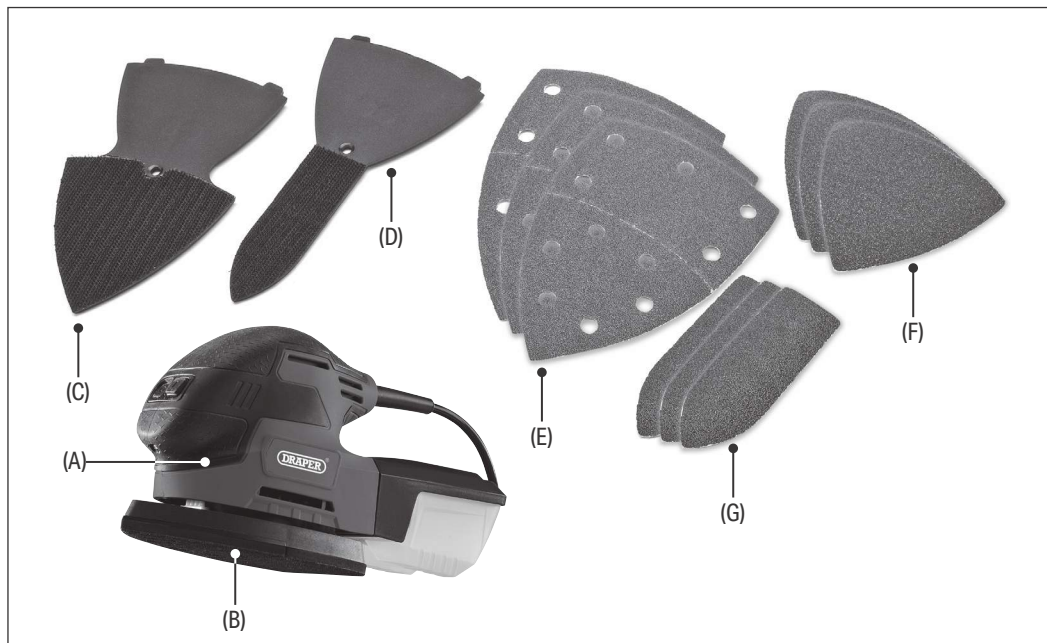
- (8) On button
- (9) Power cable and plug

6. Identification and Unpacking

6.2 What's in the Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.

Before assembling the product, lay the contents out and check them against the parts shown below. If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- (A) 1 x Detail sander
- (B) 1 x Palm hook and loop base plate*
- (C) 1 x Detail hook and loop base plate
- (D) 1 x Finger hook and loop base plate
- (E) 3 x Palm sanding sheets (60, 80, 120 grit)

- (F) 3 x Detail sanding sheets (60, 80, 120 grit)
- (G) 3 x Finger sanding sheets (60, 80, 120 grit)

**Pre-installed before shipment*

6.3 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.



WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

Important: Read and understand all the safety instructions listed in this manual before attempting to use this product.

! **WARNING! ALWAYS switch off and disconnect the mains power supply, then wait for the product to cool and completely stop before making any adjustments to this product.**

7.1 General Operation

Important: ALWAYS ensure that the base plate is raised off of the workpiece before switching on the sander.

1. Install the required hook and loop base plate onto the base plate mount (1) and attach the desired sanding sheet; see **7.3 Installing and Replacing the Base Plate and Sheets.**



Fig. 1

2. Insert the power plug (9) into a suitably rated mains power outlet, ensuring that the power supply is switched off and the tool's off button (7) is depressed.
3. Ensure that the base plate is raised away from the workpiece and press the on button (8) to start the sander.



Fig. 2

4. Grip the sander using one or both hands against the hand grips (5) on the top and front of the tool.
5. Press the sander against the workpiece and apply equal pressure, keeping the sanding sheet flat against the surface.

! **CAUTION! DO NOT use the edges of the base plate for sanding or apply excessive pressure as this may overload or damage the tool and will reduce the effectiveness of the sander.**

6. Manoeuvre the sander evenly and smoothly using long sweeping strokes across the workpiece as required.
Important: DO NOT hold the sander in the same position for prolonged periods during operation as this may result in an uneven finish. Existing finishes on the workpiece may soften from the heat of the friction.

Important: The sanding sheets are consumable items and will gradually lose effectiveness with use. Replace the sanding sheets when the abrasive surface become damaged, worn or clogged; see **7.3 Installing and Replacing the Base Plate and Sheets.**

7.2 The LED Lamp

! **WARNING! DO NOT look directly into the lamp or direct it towards others.**

The LED lamp (6) illuminates automatically when the tool is switched on and remains lit until the tool is switched off.



Fig. 3

7. Operating Instructions

7.3 Installing and Replacing the Base Plate and Sheets

⚠ WARNING! ALWAYS install the desired sanding sheet BEFORE switching on the sander.

The palm base plate (B) is pre-installed onto the sander before shipment and may be used with the palm sanding sheets (E).

To remove and install a base plate:

1. Loosen and remove the screw (10) holding the installed base plate in place.



Fig. 4

2. Slide the base plate outwards and away from the base plate mount.



Fig. 5

Important: When removing the palm base plate, only the front area of the plate may be detached.

3. Insert the required base plate, ensuring that the lugs (11) are fully inserted into the recesses (12) in the base plate mount and the screw hole is correctly aligned.



Fig. 6

4. Replace the screw securely to hold the new base plate in place.
5. Attach an appropriate sanding sheet to the base plate.



Fig. 7

Sanding sheets can be installed by pressing the smooth side of the sheet against the hook and loop area of the base plate. To remove the sanding sheets, simply peel them off the base plate.

Important: ALWAYS ensure that the openings in the sanding sheet align with any holes in the base plate. This allows dust to be extracted effectively and prevents blockages to the airflow.

⚠ CAUTION! ONLY use the sanding sheet that matches the base plate installed onto the tool. Using the incorrect sanding sheet will reduce the effectiveness of the tool and may damage the sanding plate.

The front section of the palm sanding sheets can be removed and used with the detail base plate.

Important: DO NOT use detail sanding sheets on the palm base plate.

Important: The sanding sheets and base plates are consumable items and will gradually lose effectiveness with use. Replace the sanding sheets when the abrasive surface becomes damaged, worn or clogged, and replace the base plates when the hook and loop mechanism loses effectiveness.

7.4 Choosing the Appropriate Sanding Grade

Using good-quality sanding sheets will improve the efficiency of sanding operations and reduce the time taken to complete the task. Use coarse grade sanding sheets (40, 60 or 80 grit) to remove large quantities of material or for first fix operations. For finer operations and finishing work, use 120 grit sheets.

Important: Sanding sheets are consumable items that must be replaced when they are worn or damaged.

7.5 Dust Collection and Extraction

WARNING! Inhalation of dust particles can be detrimental to your health. **ALWAYS** ensure that the tool is connected to a suitable dust collector or extraction system before switching on the product.

This tool can be used with its integrated dust collector assembly (3) or connected to an external dust extraction system.

To remove the dust collector assembly, hold the tool vertically with the dust collector assembly at the bottom.



Fig. 8

Firmly grip both the dust box and the black housing and manoeuvre the dust collector assembly downwards. Reasonable force is required to separate the dust collector assembly from the tool body.

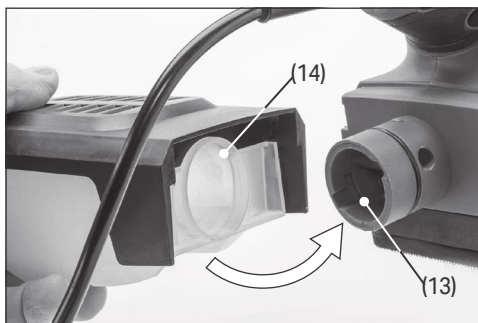


Fig. 9

To reattach the dust collector assembly to the tool, insert the extraction tube (13) into the circular opening (14) of the dust box and push the two together until they click into place. Ensure that the dust collector assembly is securely attached before use.

To connect the tool to an external dust extraction system, remove the dust collector assembly and attach the extractor hose to the sander's extraction tube. Fix the hose securely in place using a suitable hose clamp.

Important: ALWAYS ensure that any connected dust extractor is suitable for the materials to be extracted.

Empty the dust box at regular intervals to prevent blockage of the airflow; see **8.2 Dust Collector Care**.

CAUTION! DO NOT operate the tool if the dust collector assembly is full.

8. Maintenance and Troubleshooting

Important: ALWAYS ensure that the tool is switched off, disconnected from the power supply, has come to a complete stop and has completely cooled before attempting to adjust or maintain this product.

8.1 General Maintenance

- Replace sanding sheets when they become damaged, clogged or worn.
- Replace base plates when they no longer grip effectively.
- Empty the dust box at regular intervals; see **8.2 Dust Collector Care**.
- Keep the air vents clear of any dust, debris or other obstructions.
- Keep the base plate free from obstructive debris that may reduce its effectiveness when gripping sanding sheets.
- Clean the tool using a dry cloth **ONLY**.
 - **NEVER** use solvents or other aggressive substances to clean this tool as they may damage plastic or insulated parts.

8.2 Dust Collector Care

The dust collector assembly (3) must be emptied and cleaned at regular intervals to ensure the free flow of air through the tool and ensure effective sanding operation.

CAUTION! DO NOT operate the tool if the dust collector assembly is full.

To empty and clean the dust box:

1. Remove the dust collector assembly; see **7.5 Dust Collection and Extraction**.



Fig. 10

2. Empty the dust collector assembly:
 - a. Hold the dust box (2) with the circular opening facing upwards and allow the dust to fall to the bottom of the box.
 - b. Tip the dust box slightly so that the dust enters the central tube and then tip the dust away into a suitable disposal container.
 - c. Repeat this process until the dust box is empty.
3. Use the circular opening to grip the dust box and pull it away from the housing.

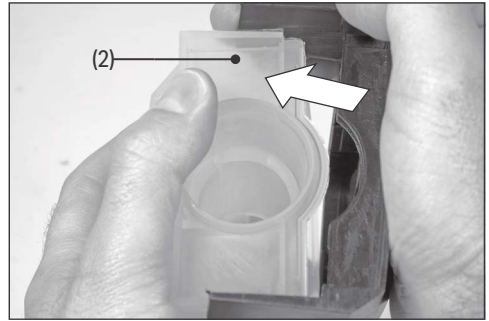


Fig. 11

Important: To prevent dust from being ejected from the dust collector assembly, ensure that the dust box is empty before removing it from the housing.

4. Tap the filter (4) housing over a suitable container to dislodge any dust and debris.



Fig. 12

Important: The filter is very fragile and cannot be removed from the housing. Take care not to touch or damage the filter during cleaning.

5. Use a dry cloth or vacuum to carefully clean around the air vent on the top of the filter housing and around the inside of the dust box.
Important: DO NOT use water or any other liquid when cleaning the dust box or filter.
6. Push the dust box back into its housing until it clicks into place.
7. Reinstall the dust collector assembly onto the tool; see **7.5 Dust Collection and Extraction**.

8.3 Storing the Product

- **ALWAYS** store the product with the dust collector assembly installed.
- Empty and clean the dust collector assembly and filter thoroughly after each use and before storage.
- Draper Tools recommends installing the palm base plate before storing this product to prevent bending, buckling or other damage to the base plate extensions.
- Store the product in a clean and dry location, out of direct sunlight and out of reach of children.

8.4 Troubleshooting

Problem	Possible Cause	Remedy
The motor does not start.	The power supply is disconnected or inactive.	Check the mains power connection.
	The internal fuse has blown.	Contact Draper Tools for repair and replacement options.
	The motor brushes are worn.	DO NOT attempt to use the product. Contact Draper Tools for repair and replacement options.
	The motor has been overloaded.	Ensure that the dust box is not full and the filter and air vents are clear. Disconnect the tool from the mains power and allow it to cool before retrying.
The product is not sanding efficiently.	The sanding sheet is worn or clogged.	Replace the sanding sheet; see 7.3 .

9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

Important: For safety, **ALWAYS** empty and clean the product of dust before returning it to Draper Tools or its authorised agent.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

DO NOT dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.





Read the instruction manual



Warning/Caution!



Wear face mask and safety glasses



Wear ear defenders



Wear protective gloves



Keep out of the reach of children



Rated input



Revolutions per minute



Sanding sheet edge dimensions



Suitable for use with palm sanding sheets



Suitable for use with detail sanding sheets



Suitable for use with finger sanding sheets



Product weight (net)



Continuous A-weighted sound power level



Class II construction (Double insulated)



WEEE –
Waste Electrical & Electronic Equipment
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish



European conformity



UK Conformity Assessed

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