







Intended use

Your BLACK+DECKER BDCROS18 random orbital sander has been designed for sanding wood, metal, plastics and painted surfaces. This tool is intended for consumer use only.

Safety instructions

General power tool safety warnings



Warning! Read all safety warnings and all instructions. Failure to follow the warnings and 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 all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

1. Work area safety

- a. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b. **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.
- c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. Electrical safety

- a. **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.
- b. **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.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the charger. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e. **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.
- f. **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.

3. Personal safety

- a. **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.

- b. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to 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.
- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g. **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.

4. Power tool use and care

- a. **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.
- b. **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.
- c. **Disconnect the plug from the power source and/or the battery pack 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.
- d. **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.

e. Maintain power tools.

Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. **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.

5. Battery tool use and care

- a. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- d. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

6. Service

- a. 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.
- b. Power to the tool should always be supplied via residual current device with a rated residual current of 30mA or less.

Additional power tool safety warnings



Warning! Additional safety warnings for sanders

- ◆ **Hold power tool by insulated gripping surfaces when performing an operation where the sanding accessory may contact hidden wiring.** Sanding accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock

◆ **Use clamps or another practical way to secure and support the workpiece to a stable platform.**

Holding the work by hand or against your body leaves it unstable and may lead to loss of control.



Warning! Contact with or inhalation of dusts arising from sanding applications may endanger the health of the operator and possible bystanders. Wear a dust mask specifically designed for protection against dust and fumes and ensure that persons within or entering the work area are also protected.

- ◆ Thoroughly remove all dust after sanding.
- ◆ Take special care when sanding paint which is possibly lead based or when sanding some woods and metal which may produce toxic dust:
 - ◆ Do not let children or pregnant women enter the work area.
 - ◆ Do not eat, drink or smoke in the work area.
 - ◆ Dispose of dust particles and any other debris safely.
- ◆ The intended use is described in this instruction manual. The use of any accessory or attachment or performance of any operation with this tool other than those recommended in this instruction manual may present a risk of personal injury and/or damage to property.

Safety of others

Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the machine, local regulations may restrict the age of the operator.

Residual risks

Additional residual risks may arise when using the tool which may not be included in the enclosed safety warnings. These risks can arise from misuse, prolonged use etc. Even with the application of the relevant safety regulations and the implementation of safety devices, certain residual risks can not be avoided. These include:

- ◆ Injuries caused by touching any rotating/moving parts.
- ◆ Injuries caused when changing any parts, blades or accessories.
- ◆ Injuries caused by prolonged use of a tool. When using any tool for prolonged periods ensure you take regular breaks.
- ◆ Impairment of hearing.
- ◆ Health hazards caused by breathing dust developed when using your tool (example:- working with wood, especially oak, beech and MDF.)

Vibration

The declared vibration emission values stated in the technical data and the declaration of conformity have been measured in accordance with a standard test method provided by EN60745 and may be used for comparing one tool with another. The declared vibration emission value may also be used in a preliminary assessment of exposure.

Warning! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used. The vibration level may increase above the level stated.

When assessing vibration exposure to determine safety measures required by 2002/44/EC to protect persons regularly using power tools in employment, an estimation of vibration exposure should consider, the actual conditions of use and the way the tool is used, including taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time.

Labels on tool

The following pictograms are shown on the tool along with the date code:



Warning! To reduce the risk of injury, the user must read the instruction manual.

Additional safety instructions for batteries and chargers

Batteries

- ◆ Never attempt to open for any reason.
- ◆ Do not expose the battery to water.
- ◆ Do not store in locations where the temperature may exceed 40 °C.
- ◆ Charge only at ambient temperatures between 10 °C and 40 °C.
- ◆ Charge only using the charger provided with the tool.
- ◆ When disposing of batteries, follow the instructions given in the section "Protecting the environment".

Chargers

- ◆ Use your BLACK+DECKER charger only to charge the battery in the tool with which it was supplied. Other batteries could burst, causing personal injury and damage.
- ◆ Never attempt to charge non-rechargeable batteries.
- ◆ Have defective cords replaced immediately.
- ◆ Do not expose the charger to water.
- ◆ Do not open the charger.
- ◆ Do not probe the charger.



The charger is intended for indoor use only.

Read the instruction manual before use.

Electrical safety



Your charger is double insulated; therefore no earth wire is required. Always check that the mains voltage corresponds to the voltage on the rating plate. Never attempt to replace the charger unit with a regular mains plug.

- ◆ If the supply cord is damaged, it must be replaced by the manufacturer or an authorised BLACK+DECKER Centre in order to avoid a hazard.

Features

This tool includes some or all of the following features.

1. Handle
2. On/off button
3. Sanding pad
4. Battery
5. Dust canister
6. Charger

Charging procedure (Fig. A)

BLACK+DECKER chargers are designed to charge BLACK+DECKER battery packs.

- ◆ Plug the charger (6) into an appropriate outlet before inserting the battery pack (4).
- ◆ Insert the battery pack (4) into the charger (6) as shown in figure A.
- ◆ The green LED (6a) will flash indicating that the battery is being charged.
- ◆ The completion of charge is indicated by the green LED (6a) remaining on continuously. The pack is fully charged and may be used at this time or left on the charger.

Note: Recharge discharged batteries as soon as possible after use or battery life may be greatly diminished. For longest battery life, do not discharge batteries fully.

It is recommended that the batteries be recharged after each use.

Leaving the battery in the charger

The charger (6) and battery pack (4) can be left connected with the LED glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

Important charging notes

- ◆ Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18°- 24°C). DO NOT charge the battery pack in an air temperature below +40°F (+4.5°C), or above +105°F (+40.5°C). This is important and will prevent serious damage to the battery pack.
- ◆ The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not

indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.

- ◆ If the battery pack does not charge properly:
 - ◆ Check current at receptacle by plugging in a lamp or other appliance.
 - ◆ Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights.
 - ◆ Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F - 75°F (18°- 24°C).
 - ◆ If charging problems persist, take the tool, battery pack and charger to your local service center.
- ◆ The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
- ◆ Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminium foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
- ◆ Do not freeze or immerse charger in water or any other liquid.

Warning! Do not allow any liquid to get inside charger. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

Charger Diagnostics (Fig.B)

Refer to the indicators in figure B for the charge status of the battery pack.

Bad Battery

If you see a bad battery blink pattern, do not continue to charge this battery. Return it to a service center or a collection site for recycling.

Hot/Cold Pack Delay

When the charger detects a battery pack that is too hot or too cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery pack has reached an appropriate temperature. The charger then automatically switches to the pack charging mode. This feature ensures maximum battery pack life. A cold battery pack will charge at a slower rate than a warm battery pack. The pack will charge at that slower rate throughout the entire charging cycle and will not return to maximum charge rate even if the pack warms.

Installing and removing the battery pack from the tool

To install battery pack (Fig. C)

- ◆ Insert battery (4) into tool until an audible click is heard (Figure. C)
- ◆ Ensure battery pack is fully seated and fully latched into position.

To remove battery pack (Fig.D)

- ◆ Depress the battery release button (7) as shown in figure D and pull battery pack (4) out of the tool.

Attaching hook and loop sanding discs (fig.E)

For best results, use BLACK+DECKER accessories.

- ◆ Your sander is designed for use with either mesh carbide sandpaper or with standard sand paper with the 8 hole dust extraction pattern.
- ◆ To attach the sanding disc (8), carefully center it over the sanding pad (3) ensuring the holes in the disc align with the holes in the pad and press the disc firmly in place.
- ◆ The hook and loop fastening system sanding disc can be easily removed by simply pulling it off. It can be reused as desired.

Use

Warning! Let the tool work at its own pace. Do not overload.

Switching on and off

- ◆ To switch the tool on, depress the on/off switch (2) at the "I" position.
- ◆ To switch the tool off, depress the on/off switch (2) at the "O" position.

Operation

Grasp the sander as shown in figure G and turn it ON. Move it in long, sweeping strokes along the surface, letting it do the work.

Pushing down on the tool while sanding actually slows the removal rate and produces an inferior quality finish.

Check your work often. Sander is capable of removing material rapidly especially with coarse paper.

Dust Collection (Fig. H, I)

Warning! Collected sanding dust from sanding surface coatings (polyurethane, linseed oil, etc.) can selfignite in sander dust bag or elsewhere and cause fire. To reduce risk, empty bag frequently and strictly follow sander manual and coating manufacturer's instructions.

- ◆ To attach the canister to the sander, line up the grooves in the canister (9) with the nubs (10) on the dust port.
- ◆ Slide the canister onto the dust port and turn the canister clockwise to lock it in place as shown in Figure H.

- ◆ To remove, turn the canister counterclockwise and slide the canister off.
- ◆ To empty the canister, remove it from the dust port and dump the sanding debris into an appropriate trash receptacle Figure I.

Maintenance

Your tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

Warning! Before performing any maintenance, switch off and unplug the tool.

- ◆ Regularly clean the ventilation slots in your tool using a soft brush or dry cloth.
- ◆ Regularly clean the motor housing using a damp cloth. Do not use any abrasive or solvent-based cleaner.

Mains plug replacement (U.K. & Ireland only)

If a new mains plug needs to be fitted:

- ◆ Safely dispose of the old plug.
- ◆ Connect the brown lead to the live terminal in the new plug.
- ◆ Connect the blue lead to the neutral terminal.

Warning! No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 5 A.

Protecting the environment



Separate collection. Products and batteries marked with this symbol must not be disposed of with normal household waste

Products and batteries contain materials that can be recovered or recycled reducing the demand for raw materials. Please recycle electrical products and batteries according to local provisions. Further information is available at www.2helpU.com

Technical data

BDCROS18 H1		
Input voltage	V _{ac}	18
Oscillations (no load)	min ⁻¹	12000
Orbits (no load)	min ⁻¹	12000
Sanding base surface	mm ²	12660
Weight	kg	0.9
Battery		BL1518
Voltage	V _{DC}	18
Capacity	Ah	1.5
Type		H4

BDCROS18 H1		
Charger	SSC-250040X	
Input voltage	V _{AC}	230
Output voltage	V _{DC}	8 - 20
Current	mA	400

L _{PA} (sound pressure) 71.5 dB(A), Uncertainty (K) 3 dB(A)		
L _{WA} (sound power) 82.5 dB(A), Uncertainty (K) 3 dB(A)		
Vibration total values (triax vector sum) according to EN 60745:		
Vibration emission value (a _v) 3.4 m/s ² , uncertainty (K) 1.5 m/s ²		

EC declaration of conformity

MACHINERY DIRECTIVE



BDCROS18 Random orbital sander

Black & Decker declares that these products described under

"technical data" are in compliance with:

2006/42/EC, EN 60745-1:2009 +A11:2010,

EN 60745-2-4:2009 + A11:2011

These products also comply with Directive

2014/30/EU and 2011/65/EU.

For more information, please contact Stanley Europe at the following address or refer to the back of the manual.

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of
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