

Operation Manual

Mini Saw with Laser

62554



Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.



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If you should find a mistake or wish to make a suggestion for improvement, we look forward to hearing from you.

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Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.** Keep these operation instructions safe.

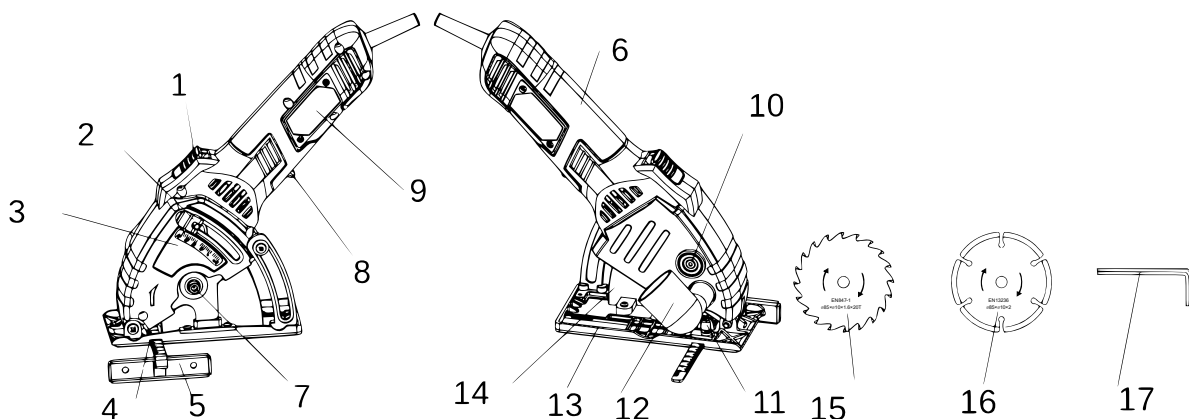
Application

This mini saw is primarily intended for sawing solid wood, chipboard, plywood, aluminium, tiles, and stone in a fixed position in the longitudinal and transverse direction. Please note that the saw blade pre-assembled in the machine is only intended for processing wood. Any other use or structural modification of the device can lead to considerable dangers, thus being considered improper use. The mini saw is not suitable for commercial use.



Warning! For your own safety, carefully read these instructions and the general safety instructions before using the saw. Your power tool should only be passed on together with these instructions.

Overview of the main components



No	Name	No	Name
1	Safety lock button for mechanical depth stop	10	Spindle lock button
2	Clamp for setting the cutting depth with locking lever	11	Guide rail locking screw
3	Cutting depth scale	12	Vacuum cleaner connection
4	Guide rail slot	13	Base plate
5	Guide rail	14	Tiltable protective cover
6	Handle	15	TCT circular saw blade (universal)
7	Washer	16	Diamond saw blade for stone/tiles
8	On/off switch	17	Hexagon socket wrench
9	Nameplate		



Scope of delivery

- Remove all packaging materials, remaining packaging and transport brackets (if present).
- Check that the contents of the package are complete.
- Check the device, the power cord, the power plug, and the accessories for transport damage.
- If possible, keep the packing materials until the end of the guarantee period.



Warning! Packaging materials are not toys. Children are not allowed to play with the plastic packaging. **Risk of suffocation!**

1 × mini saw		
1 × parallel stop		
1 × vacuum cleaner connection	(12)	
1 × hexagon wrench	(17)	
2 × clamp	(2)	
3 × guide rail	(5)	
3 × saw blade	wood (HSS):	∅85×1.6 mm
	stone:	∅85×2 mm
	universal (TCT):	∅85×1.8 mm

General safety instructions for electric devices

Warning! Carefully read all safety information and instructions in this manual. Failure to do so could result in electric shock, fire, or serious injury. Keep these instructions in a safe place so that you can always refer to them.

Work area safety

- **Always keep your work area tidy and well lit.** Dark or cluttered work areas increase the risk of injury.
- **Do not use electric devices in potentially explosive areas, e.g., near flammable liquids, gases, or dust.** Electric devices can cause sparks igniting these substances.
- **Keep children and bystanders away from your work area while you are operating an electric device.** Distractions can cause you to lose control of the device.

Electric safety

- **The power plug must match the socket. Never make changes to the power supply unit. Do not use adapter plugs on earthed power tools.** Unmodified plugs and matching sockets reduce the risk of electric shock.
- **Avoid body contact with earthed surfaces, e.g., pipes, refrigerators, stoves, and heaters.** The risk of electric shock increases with the body being earthed.
- **Do not expose the device to rain or a damp environment.** If water gets into the device, it increases the risk of electric shock.
- **Handle the power cord with care. Never use the power cord to carry, pull, or unplug the device. Keep the power cord away from heat, oil, sharp edges, or moving parts.** Damaged or knotted power cords increase the risk of electric shock.
- **If wanting to use the electric device outdoors, use an extension cable suitable for outdoor use.** Using an outdoor power cord will reduce the risk of electric shock.
- **If use in a damp environment cannot be prevented, use a protected power supply with an FI circuit breaker.** The use of a residual current circuit breaker reduces the risk of electric shock.



Personal safety

- **Stay vigilant! Pay full attention to what you are doing and always use electric devices responsibly and carefully. Do not use them when tired or under the influence of alcohol, drugs, or medicines.** A moment of inattention during use can result in personal injury.
- **Dress appropriately – do not wear loose clothing or jewellery. Tie long hair together and keep hair, clothing, and gloves away from moving parts.** Loose clothing, jewellery or long hair increase the risk of injury, as they can get caught in moving parts.
- **Avoid unintentional switching on of electric devices. Make sure that the device switch is off before connecting the device to the mains.** Do not carry the device with your finger on the on/off switch.
- **Do not lean too far. Make sure you have a firm stance and keep your balance.** A secure stance enables better control of the electric device in an unexpected situation.
- **Put on safety equipment.** Wear protective goggles, a respirator, work gloves, and non-slip safety shoes while working with the device.
- **If devices are provided for connecting dust extraction systems, ensure that they are connected and used correctly.** The use of dust collection can reduce the hazards arising from dust.

Using an electric device and caring for it

- **Do not use force on the electric device. Always use the right attachment for your device.** With a suitable attachment, the device works more effectively and safely, as it was designed for the respective task.
- **Do not use the electric appliance if the switch does not turn on and off.** An electric device impossible to be operated at the switch is dangerous and must therefore be repaired immediately.
- **Pull the power plug before making changes, replacing accessories, or storing the device.** This precautionary measure reduces the risk of the device starting up unintentionally.
- **Store an electric device out of the reach of children when not in use. Do not allow the device to be operated by persons unfamiliar with its use or these instructions.** An electric device in the hands of inexperienced users can be dangerous.
- **Maintain the electric device regularly. Check for improper assembly or blockage of moving parts, defects, damage, and any other condition that could limit the proper functioning of the device.** If the device is damaged, have it repaired before use. Many accidents are due to poor maintenance.
- **Use an electric device and its accessories in accordance with these instructions, considering the working conditions and the work to be performed.** Improper use of the electric device can lead to dangerous situations.

Safety of maintenance

Have your power tool serviced by a qualified specialist only with identical spare parts. This ensures that the safety of the power tool is guaranteed.

Safety instructions concerning saws

Cutting

- **Danger! Keep your hands away from the cutting area and the saw blade. Keep your second hand on the auxiliary handle or the motor housing.** With both hands holding the saw, there is no risk of cutting yourself with the saw blade.
- **Do not reach under the workpiece,** as the saw blade comes out there, and you could reach into it.
- **Adjust the cutting depth to the thickness of the workpiece.** No more than one tooth of the saw blade should emerge below the workpiece.



- **Never hold the workpiece with your hand or between your legs. Secure the workpiece to a solid base.** It is important to properly secure the workpiece to minimise slipping, jamming of the saw blade, or loss of control.
- **Only hold the saw by insulated gripping surfaces when performing work in which the cutting tool can cut into hidden cables or its own cable.** Contact with a live wire will also cause exposed metal parts of the power tool to be live and electrocute whoever is sawing.
- **Always use a parallel or a straight edge guide when sawing.** This improves the cutting accuracy and reduces the possibility of the saw blade getting stuck.
- **Always use saw blades with the correct size and shape (diamond or round) for the mounting hole.** Saw blades not fitting the assembly device of the saw run out of round and lead to loss of control.
- **Never use damaged or unsuitable washers or screws for the saw blades.** The washers and screws have been specially designed for this saw in order to achieve optimal and safe work results.

Kickbacks and warnings

- Kickbacks are caused by a jammed, stuck, or misaligned saw blade, causing the saw to detach from the workpiece and move in the direction of whoever is cutting.
 - If the saw blade is jammed or stuck because of the kerf closing, the motor movement will force the device quickly backwards and in the direction of the operator.
 - If the saw blade twists or loses its alignment in the kerf, the teeth on the rear edge can dig into the top of the wood, causing the saw blade to jump out of the kerf and towards the operator.
- Incorrect use or the work conditions cause kickbacks, which can be avoided by taking the following precautionary measures:
 - Firmly hold the saw with both hands, and hold your arms so that they can absorb a possible kickback. Position yourself so that you are on both sides of the saw blade, but not in line with it. Kickback could cause the saw to jump back.
 - If the saw blade is stuck or if a cut is interrupted for any reason, release the trigger and hold the saw motionless in the material until the saw blade has come to a complete standstill. Never try to remove the saw from the workpiece or to pull the saw backwards while the saw blade is moving, otherwise kickbacks may occur.
 - If you restart a saw in the workpiece, align the saw blade in the middle of the kerf and make sure that the saw teeth do not reach into the material. If the saw blade is stuck, it can be pushed up or backwards by the workpiece when the saw is restarted.
 - Support large panels to minimise the risk of the saw blade getting jammed or the device kicking back. Large panels tend to flex under their own weight. The supports must be placed under the plate on both sides. One support is placed near the cutting line and the other near the panel edge.
 - Do not use worn or damaged saw blades. Blunt or incorrectly adjusted saw blades create a narrow kerf, which leads to excessive friction, to the saw blade becoming jammed or to the device kicking back.
 - The locking levers for adjusting the depth and angle of the blades must be tightened and secured before you start sawing. If the blade setting shifts while cutting, the saw blade may become jammed or the device may kick back.
 - Take special care when cutting into existing walls and/or blind spots. The protruding saw blade could hit objects that are not visible to you and that could cause the device to kick back.

Protective devices

- Before each use, check whether the protective device is properly closed. Do not operate the saw if the guard does not move freely and does not immediately cover the blade. Never clamp the guard in such a way that the saw blade is exposed. If the saw is accidentally dropped, the guard may be bent. Make sure that the guard can move freely and cannot touch the saw blade or any other part at any cutting angle and/or depth.
- Check the function and condition of the return spring of the protective device. If the guard and spring are not working properly, they must be serviced before use. The protective device could



possibly work with a delay due to damaged parts as well as deposits of debris and foreign objects.

- Make sure that the bottom plate of the saw does not shift during the plunge process if the setting of the cutting angle is not 90°. If the saw blade shifts to the side, it will jam and the device may kick back.
- Make sure that the guard covers the saw blade before placing the saw on the table or floor. A saw blade that runs out unprotected causes the saw to move backwards and cut into everything in its path. You should know how long it takes for the blade to come to a complete standstill after you have let go of the switch.

Saw blade replacement and safety

- The protective device provided with the tool must be securely attached to the power tool so that as little of the saw blade as possible protrudes. The protective device shields the operator from flying splinters of a broken saw blade and from accidental contact with the saw blade.
- Use only bonded, reinforced or diamond-coated saw blades for your saw. The mere fact that an accessory can be attached to your power tool does not mean that it is safe to use.
- The nominal speed of the accessories must be at least equal to the maximum speed specified on the power tool. Accessories running faster than their rated speed can break and be thrown around.

Saw blades in general

- Saw blades may only be used for the recommended applications. For example, they must not be used for grinding. Lateral forces exerted on a saw blade can cause the blade to crack.
- Always use undamaged saw blade flanges that have the correct diameter for the selected saw blade. Correct flanges support the saw blade, thus reducing the risk of the blade breaking.
- Do not use worn, reinforced saw blades from larger power tools. Saw blades designed for a larger power tool are not suitable for the higher speed of a smaller tool and can break.
- The outside diameter and density of your accessories must be within the performance range of the saw. Unsuitable accessories cannot be adequately protected or controlled.
- The size of the mandrel of the saw blade and the flange must match the spindle of the saw. Flanges with holes that do not mate with the power tool fasteners can become unbalanced, run irregularly, and might cause loss of control of the saw.
- Do not use damaged saw blades. Check the blades for debris and cracks before each use. If the saw or a saw blade is dropped, inspect it for damage or attach an undamaged blade. After checking and attaching the saw blade, move the device to a safe position for the saw and bystanders and let it run for one minute at the highest idle speed. Damaged saw blades usually break during this test period.
- Wear protective clothing. Depending on the work to be performed, wear full face protection, safety goggles or safety glasses. It is also recommended to wear a dust mask, hearing protection and safety gloves. The protective goggles must be able to keep foreign bodies away from the various possible uses of the device. The dust mask should be able to filter out particles arising during work. Exposure to excessive noise for too long can damage your hearing.
- Keep the power cord away from rotating parts. If you lose control, the power cord could be cut or caught, causing your hand or arm to get caught in the saw blade.
- Never operate the saw while you are carrying it. Accidental contact can result in parts of your clothing getting caught in the moving parts of the machine and being pulled into the saw blade.
- Regularly clean the ventilation system of the saw. The motor fan allows dust to get into the housing. Too much dust build-up can cause the fan to clog and create electrical hazards.
- Do not use accessories that require liquid coolant. Using water or other liquid coolants could result in electric shock.



Additional safety instructions

- Kickback is a reaction to the saw blade suddenly becoming stuck or pinched. As a result, the saw blade suddenly comes to a standstill, because of which the saw is driven in the direction opposite to the cutting direction and gets stuck.
- If a saw blade is jammed or stuck in the workpiece, the saw blade edge can become wedged and penetrate the surface of the material, causing the saw blade to pop out. The saw blade can either jump in the direction of the operator of the saw or move away from him, depending on which direction the saw blade was moving when it was pinched. Saw blades can also shatter under these conditions.
- Keep your body and arms at a distance from the saw and firmly hold the device to be able to absorb kickback forces. Always use an auxiliary handle, if available, for maximum control over kickback or torque reaction when starting.
- Do not attach saw chains or blades for wood carving, nor diamond disks with an edge gap larger than 10 mm, nor toothed saw blades. Such cutting blades cause severe kickback and loss of control.
- Do not pinch the saw blade by applying excessive pressure or try to achieve excessive cutting depth. Overuse of the saw blade increases the load and the susceptibility of the saw blade to twist and get stuck. There is also the risk that the device will be kicked back or that the saw blade will burst.
- If the saw blade becomes stuck or if a cut is interrupted for any reason, switch off the power supply and hold the saw until the saw blade has come to a complete standstill. Never try to pull the saw blade out of the workpiece while it is still running, otherwise kickback may occur.
- Do not start cutting with the saw blade in the workpiece. Wait for the saw blade to reach maximum speed before reinserting it into the cut. The saw blade can get stuck or kick back if the device is restarted within the workpiece.

Assembly

Note: If possible, we recommend setting the cutting depth approx. 2 mm deeper than the material thickness. This should help you get a clean cut.

Loosen the clamp locking lever to adjust the cutting depth, set the desired cutting depth on the scale and clamp the locking lever back in.

Replacing a saw blade



Warning! Incorrect alignment of the saw blade can permanently damage the saw. Do not use grinding wheels!


1. Make sure that the saw is disconnected from the mains.
2. Press the spindle lock button **(10)** and hold it, loosen the clamping screw and washer with the hexagon key (turn clockwise to open). Remove the clamping screw with washer.
3. Set the cutting depth to the maximum (see section "Setting the cutting depth").
4. Lift the bottom plate **(13)**.
5. Remove the saw blade.
6. A saw blade is attached in the reverse order. Use the correct flanges.
7. Press the spindle lock button **(10)** until it clicks, and firmly tighten the clamping screw.

Note: The arrow on the saw blade must point in the same direction as the arrow on the device showing the direction of rotation.



Commissioning

Switching on/off the device

 **Warning!** Before you press the on/off switch, make sure that the saw blade runs regularly. Check whether the saw blade is seated correctly and runs smoothly and whether the clamping screw of the saw blade is firmly tightened.

Using the saw

Press the lock button forwards with your index finger (see arrow direction). Press the on/off switch firmly backwards. When you let go of the trigger, the main switch will automatically return to its original position and the saw will turn off.

 **Warning:** After the saw has been switched off, the saw blade continues to rotate.

Untightening the plunge cut stop

Press and hold the rear end of the safety-lock button.

Note: Pressing the safety lock button unlocks the plunge cut so that the motor can be moved downwards. The saw blade emerges from the pivoting protective cover. Do not connect to the power supply before use. First, check that the tilting protective cover is working.

Adjusting the parallel stop

Loosen the locking screw for the parallel stop on the base plate. Now slide the saw into the slot in the guide rail that is intended for the stop. Set a width and re-tighten the locking screw for the parallel stop.

Line layout


A V-shaped laser is located on the head side of the saw housing so that a line can be traced as you cut.

Extracting dust

The saw is a powerful tool that can generate a lot of dust. As the device has a completely closed saw blade, the extraction of dust is particularly efficient. A dust extraction system should be used for all work except small trimming work.

1. Slide a dust extraction hose onto the vacuum cleaner connection.
2. Now connect an extraction device approved for the extraction of sawdust and splinters to the dust extraction hose.

Cutting

 **Warning!** Before starting the saw, check whether the tiltable protective cover properly works. Always cut forward. Never pull the saw backwards. If you are a beginner, practice using the device by cutting thin wood until you are comfortable using the device.

- Check the specifications to make sure that the material to be cut is suitable.
- Use the correct saw blade. Make sure that it is sharp and undamaged.
- Set the cutting depth.
- Place the material to be cut on a flat surface, e.g., a workbench, a table or a floor. Use a suitable mat (excess material) if
 - you do not want to damage the work surface;
 - the work surface can damage the saw blade, e.g., on a concrete floor.



- Connect the saw to the power supply.
- Hold the device firmly and place its metal base plate on the surface to be cut. Make sure that the rear half of the base plate protrudes beyond the work surface. Do not pierce the saw blade into the material.
- Switch on the saw and wait a moment until the saw blade has reached the highest speed. Then press the safety lock button and press the saw blade slowly and gently, but still firmly, into the material. Then slide the tool forward along the line to be cut.
Note: Never pull the saw backwards!
- The tool should be guided along the cut with very little force. Too much force will cause the operator to become tired and the saw blade and saw itself to be excessively worn. Exerting too much force can also lead to the temperature protection being activated, which leads to delays in the operating sequence.
- Make sure that the base plate always lies flat on the material to be cut. This is especially important at the beginning and at the end of a cut and whenever thin strips are cut that do not fully support the base plate.
- When you have finished cutting and before switching the saw off, lift it off the work surface. If there is a lot of dust, leave the saw switched on for a few more seconds so that the remaining dust can be extracted from the interior of the device.

Plunge cutting

- Plunge cutting may not be possible with some hard materials.
- Select a suitable saw blade for hard materials and insert it. Unplug the power cord, set the cutting depth, and then place the metal base plate on the work surface. Make sure that the front marking on the base plate is on the starting line.
- Switch on the saw and wait a moment until the saw blade has reached the highest speed. Next, dip the saw blade slowly and gently, yet firmly, into the material. Then slide the saw forward along the line to be cut.
Note: Never pull the saw backwards!
- When reaching finish line, lift the saw off the work surface before turning it off. If there is a lot of dust, leave the saw switched on for a few more seconds so that the remaining dust can be sucked out of the inside of the device.

Tips for plunge cutting

- If the cut is to be covered, e.g., by a ventilation cover, the corners can overlap; this will ensure that the cut-off parts are completely detached.
- If the cut-out can be seen, the corners must not overlap. In these circumstances, since the saw blade is circular, the cut-off parts will not be completely detached. The corners must therefore be reworked with a knife. If the material is thin and the back is unimportant, the cut-off parts can simply be pushed out.
- If you can get to the back of the material to be cut, the cut-out can be made slightly larger from behind. The cut is then done from the back to ensure perfect corners on the front.

Cutting particularly hard or rough material

- Before you saw something harder, learn how to use the saw by using it on soft wood. When cutting harder material, e.g., hardwood, more force is required to hold the workpiece, and you may need to clamp it.
- Never cut materials that set free toxic dust or fumes such as asbestos.

Cutting ceramic tiles, slate, etc.

- Only use a saw blade specially developed for this purpose.
- Always use a suitable vacuum cleaner or a connected dust extraction system, as the dust can be dangerous for the operator and prevents the protective device from properly working.



Plasterboard

- The saw is only recommended for occasional cuts in plasterboard; a suitable vacuum cleaner should always be switched on. This is because the dust can prevent the protective device from properly working.
- Conventional tools such as hole saws or knives usually give excellent results; however, the saw can be used when a particularly clean, dust-free cut is required or when there is a risk of pipes or cables being cut.

Cleaning and maintaining the device

Regular cleaning is required to operate the saw safely as excessive build-up of dust will cause the tool to stop working properly.

- Pull out the power plug.
- Thoroughly clean the saw with a small, soft brush, such as a paintbrush.
- Always keep the ventilation openings on the motor housing clean and free of foreign objects.
- Never use caustic or solvents to clean the plastic parts.

Saw blade

- Always use a sharp saw blade.
- If the saw does not cut as well as expected, or if it overheats (temperature cut-off can be activated), the most common cause is a dull saw blade.
- It is difficult to see or feel if the saw blade is blunt. If there is any doubt, use a new saw blade.
- Saw blades are consumables.
- Be careful when changing the saw blade, as a saw blade can get hot during use. Let the saw blade cool down for a while before replacing it.
- Store the saw in a dry area when not in use.

Technical specifications

Nominal voltage (V)		220–240	
Nominal frequency (Hz)		50	
Nominal power (W)		600	
Motor speed (1/min)		7400	
Saw blade diameter (mm)		85	
Max. cutting depths (mm)	Wood	25	
	Stone/tiles	10	
Flange diameter (mm)		25×10	
Sound pressure level L_{pA} (dB (A))		96	Caution! Wear a hearing protection in case the sound pressure exceeds 85 dB (A).
Incertitude value K_{pA} (dB (A))		3	
Sound power level L_{WA} (dB (A))		107	
Incertitude value K_{WA} (dB (A))		3	

The noise emission values have been measured according to the relevant standard.

Disposal regulations

EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electric and electronic equipment and appliances.

All WiITec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WiITec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

Disposal of used electric and electronic appliances (intended for use in the countries of the European Union and other European countries with a separate collection system for these appliances).

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electric waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

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