## #45831 - MANUAL

Read these instructions completely before using this product and retain this owner's manual for future reference.

## **SPECIFICATIONS**

3.6V Input:

1.5Ah Li-Ion Battery: 5.000-18.000 rpm No load speed:

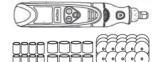
Speed settings:

Ø1,6, 2,4, 3,2 mm Collet size:

Charge Time: 3-5 Hours Speeds: 1-6

Weight: 0.2 kg

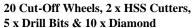
# STANDARD EQUIPMENT

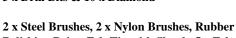


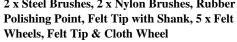
**Engravers** 

**Cordless 3.6V Rotary Tool** 

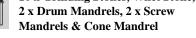
16 x Sanding Bands & 30 Sanding Discs







10 x Grinding Stones, Whet Stone, 2 x Drum Mandrels, 2 x Screw



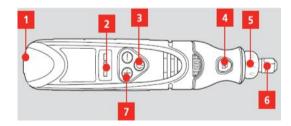


USB Cable, 5 x Collets, Spanner, LED Collar & Carry Case

## **KNOW YOUR PRODUCT**

## **CORDLESS 3.6 ROTARY TOOL**

- 1. Charging Input
- 2. Battery Status Indicator Light
- 3. On/Off Button
- 4. Spindle Lock Button
- 5. Shaft Collar
- 6. Collet Nut
- 7. Variable Speed Controls



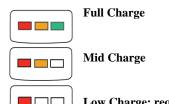
# **SETUP & PREPARATION** 1. BATTERY & CHARGER

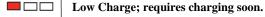


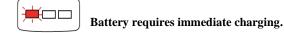
**WARNING!** THE POWER SUPPLY FOR THIS CHARGER IS RECOMMENDED FOR USE WITH A RESIDUAL CURRENT DEVICE (RATED AT 30mA OR LESS).

## **Battery Charge Indicator**

The rotary tool is equipped with a battery status indicator to show the battery charge state. Press the on/off button and see which LED lights up to gauge the status.







**Note:** The charger cable needs to be removed from the tool to check the charge state.

**Note:** Once connected for charging, the battery status indicator lights will illuminate red and remain so whilst charging. The green LED will illuminate when the tool is fully charged.

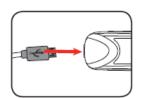
# Charging with using an AC Adaptor

- 1. Plug one end of the USB cable into the AC Adaptor (not included) and connect the adaptor into mains power outlet.
- 2. Plug the other end of the USB cable directly into the charging input of the device.



# Charging Using A USB Outlet1.

- 1. Plug the USB cable directly into the charging input.
- 2. Charge via USB cable to a USB outlet.



# 2. INSTALLING ACCESSORIES

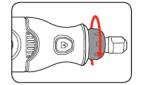


**WARNING!** ENSURE THAT THE TOOL IS SWITCHED OFF BEFORE PERFORMING ANY OF THE FOLLOWING OPERATIONS.

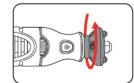
## Attaching the LED Light Collar

The LED collar can be attached to provide additional direct lighting on your workpiece during detailed, precision work.

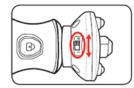
 Turn the shaft collar anticlockwise to loosen and remove it.



Slide the LED collar onto the shaft and turn it clockwise to tighten it into place.

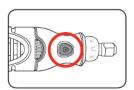


- 3. Flip the lever on the back of the LED collar to the 'I' position to turn it on.
- 4. To turn off the LED collar, flip the lever to the '0' position.

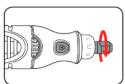


# **Attaching Accessories**

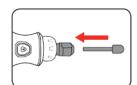
Press and hold the spindle lock button.



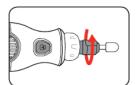
2. Using the supplied wrench, slightly loosen the collet nut.



3. Insert the shaft of the accessory into the collet.



 With the spindle lock button engaged, finger tighten the collet nut until the accessory shank is firmly gripped by the collet.



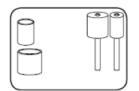
#### Note:

Avoid excessive tightening of the collet nut when no accessory is inserted, as this may cause the collet to get stuck in the collet nut. If this happens, push the shank of an accessory into the hole of the collet nut.

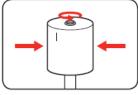
## 3. SANDING

## Sanding bands

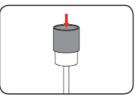
<u>Materials:</u> timbers, plastics, soft metals, ceramics, stone and glass. Sanding bands can be used for shaping wood, smoothing edges and sanding inside curves. The drum mandrels allow you to easily replace the sanding bands when they become worn and lose their grit.



 Using the small screwdriver on the back of the spanner, loosen the small screw on the drum mandrel to contract the drum.



2. Slide a sanding band onto the drum and retighten the screw to hold the band in place.

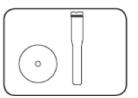




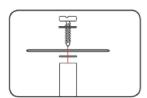
WARNING! BEFORE EACH USE, ENSURE THAT THE DRUM IS SUFFICIENTLY EXPANDED TO SECURE THE BAND DURING USE. LOOSE ACCESSORIES MAY FLY OFF AND CAUSE INJURY TO THE OPERATOR AND/OR BYSTANDERS.

## **Sanding Discs**

<u>Materials</u>: timbers, plastics, soft metals, ceramics, stone and glass. Sanding discs are good for smoothing and shaping wood or fibreglass, stripping paint and removing rust. The flexible discs make them good for sanding contoured surfaces and hard to reach areas. Attach these to a screw mandrel for use and replace them when worn.



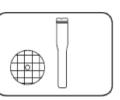
- Loosen and remove the small screw from the top of the screw mandrel. Also remove one of the washers from the mandrel.
- 2. Slide a sanding disc onto the mandrel, then replace the washer and screw to hold the disc in place



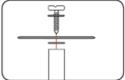
## 4. CUTTING & DRILLING

## **Cut-Off Wheels**

<u>Materials</u>: timbers, plastics, soft metals, ceramics, stone and glass. These emery discs can be used for shortening bolts, reslotting stripped screwheads, cutting through small rods and tubing or making rectangular holes in sheet metal. Attach these to a screw mandrel for use and replace them when worn.

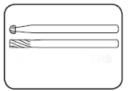


- 1. Loosen and remove the small screw from the top of the screw mandrel. Also remove one of the washers from the mandrel.
- 2. Slide a cut-off wheel onto the mandrel, then replace the washer and screw to hold the disc in place.



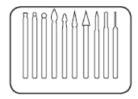
## **HSS Cutters**

<u>Materials:</u> leather, timbers, plastics, soft metals (aluminium, copper, brass etc.) and clay. High speed cutters can be used for carving, cutting out grooves, slots and inlays or hollowing out surfaces.



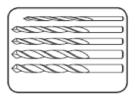
# **Diamond Engravers**

<u>Materials:</u> timbers, plastics, hard & soft metals, jewellery, ceramics, stone, glass and scrimshaw. These engravers have diamond particles embedded and are ideal for fine detail work on harder materials such as jewellery, ceramic, hardened steel or glass. They can also be used to touch up and finish surfaces.



#### **Drill Bits**

<u>Materials:</u> timbers, plastics and soft metals. These are ideal for making small holes in workpieces. Change out the collets to suit the size of the drill bit shank.

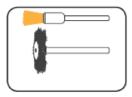


## 5. POLISHING

## **Steel Brushes**

<u>Materials:</u> brass, copper, pewter, aluminium, stainless steel.

The steel brushes are ideal for removing rust and corrosion, polishing, deburring and blending surfaces, as well as cleaning electrical components.

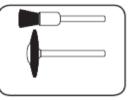


#### Note:

Allow the tips of the wire brushes to do the work. Do not apply excessive pressure or use the sides of the bristles on the work surface as this may cause the bristles to wear and break.

## **Nylon Brushes**

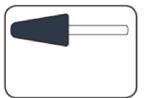
<u>Materials</u>: hard plastic, aluminium, silverware, jewellery and other precious metals. The nylon brushes are ideal for light deburring, general cleaning and polishing jobs. These can also be used with polishing compound (not supplied) for faster cleaning or polishing.



## **Rubber Polishing Point**

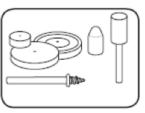
Materials: stone, ceramics and ferrous metals.

The rubber tip is embedded with abrasives for removing rough areas, small burrs and scratch marks left from grinding and sanding. Also ideal for cleaning and defining grooves..

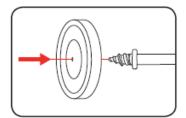


# Cloth Wheel, Felt Wheels & Felt Tips

<u>Materials</u>: plastics, jewellery, soft and ferrous metals, stone, glass and ceramics The felt polishing wheels and tips can be used to smooth semi-rough surfaces, cleaning and polishing. The cloth wheel is ideal for polishing silverware or car detailing to a high lustre and restoring door or window hardware. Attach these to the cone mandrel for use.



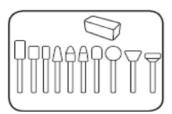
 Thread the felt or cloth wheel straight down onto the cone mandrel and tighten all the way down to the collar of the shank.



# 6. GRINDING

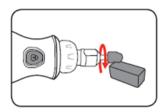
# **Grinding Stones**

<u>Materials</u>: soft and hard metals (including stainless steel), ceramic, stone, glass. The aluminium oxide grinding stonesare great for cleaning up welded joints, deburring castings, removing rust, cutting rivets, sharpening tool blades or just general purpose grinding on metals.



The grinding stones will wear out with use, and make subsequent use uneven and hard to control for precision work. These can be reshaped using the method below.

- Secure the unbalanced grinding stone in the rotary tool.
- Turn on the rotary tool and run the whet stone lightly against the revolving grinding stone. This will remove high spots on the accessory.



#### Note:

Maintain a firm grip on the rotary tool and the whet stone. Do not apply excessive pressure against the spinning grinding stone, let the whet stone and tool do the work.



WARNING! WEAR SAFETY GLASSES, WELL FITTING GLOVES AND BE MINDFUL ABOUT FINGER PLACEMENT WHEN HOLDING THE WHET STONE AGAINST THE GRINDING ACCESSORY.

# 7. CONTROLS

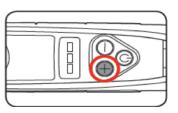
#### On/Off Button

- Press the on/off button to turn the tool on. The battery charge indicator LEDs will illuminate.
- 2. To turn the tool off, press the on/off button again.



# **Variable Speed Control**

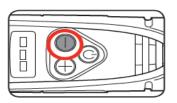
Once the tool is turned on, press the '+' button to increase the speed.



#### Note:

The default speed of the tool when turned on is '3'. Press the '+' and '-' buttons as appropriate to vary the speed setting between 1 and 6.

1. Um die Geschwindigkeit zu reduzieren, drücken Sie die "-" Taste.



## 8. SPEED SELECTION

# **Recommended Speed Settings**

The figures listed are intended as a guide only. Always test settings and accessories on a scrap piece of material beforehand.

	Timbers	Plastics	Soft Metals	Hard Metals	Ceramic, Stone, Glass
Sanding	1-6	1-2	1-2	6	1-6
Cutting	6	3	3-6	3-6	-
Engraving	6	3-6	3-6	3-6	6
Drilling	6	1-6	3-6	-	-
Polishing	3-6	3-6	3-6	3-6	3-6
Grinding	6	-	2-3	6	3-6

#### TROUBLESHOOTING



## Sparking visible through the housing air vents

A small amount of sparking may be visible through the housing vents. This is normal and does not indicate a problem.

#### The tool loses power during use.

- Battery could be low and requires charging.
- The tool could have overloaded due to excessive pressure. Turn the product back on and reduce the load.

#### LED Light Collar does not turn on

 Battery could be low and require replacing. Undo the 3 screws on the back of the LED collar and replace the 2 CR927 batteries. Take note of the direction of the button cell batteries when replacing them.

# **MAINTENANCE**

## Cleaning

- We recommend that you clean the appliance immediately after you use it.
- Keep the safety devices free of dirt and dust as much as possible. Wipe the equipment with a clean cloth.
- Clean the appliance regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the appliance. Ensure that no water can get into the interior of the appliance.

## Storage

Keep in a dry, frost free location, out of reach of children.

**Note:** Eurotops Versand GmbH will not be responsible for any damage or injuries caused by the repair of the tool by an unauthorised person or by mishandling of the tool.

n <sub>o</sub>	No Load Speed			Double Insulated
<b>®</b>	Regulat (RCM)	tory Compliance Mark	$\overline{\mathbb{V}}$	Warning
<b>(3)</b>		Read Instruction Manual		

## **ELECTRICAL SAFETY**

**WARNING!** When using mains-powered tools, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric shock, personal injury and material damage. Read the whole manual carefully and make sure you know how to switch the tool off in an emergency, before operating the tool. Save these instructions and other documents supplied with this tool for future reference.

## This tools charger is double insulated; therefore no earth wire is required.

Note: Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool. If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer in order to avoid a hazard.

#### Using an Extension Lead

Always use an approved extension lead suitable for the power input of this tool. Before use, inspect the extension lead for signs of damage, wear and ageing. Replace the extension lead if damaged or defective. When using an extension lead on a reel, always unwind the lead completely. Use of an extension lead not suitable for the power input of the tool or which is damaged or defective may result in a risk of fire and electric shock. The power supply for this products charger should be protected by a residual current device (rated at 30mA or less). A residual current device reduces the risk of electric shock.

# $\triangle$

## GENERAL POWER TOOL SAFETY WARNINGS

**WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions 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.

## 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 power tool. 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.

#### 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.
- h. 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.

#### 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 tool's 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.
- h. 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.

#### 5. 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

# **ROTARY TOOL SAFETY WARNINGS**



**WARNING!** Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.

- The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- Threaded mounting of accessories must match the spindle thread. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck. If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.
- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
- Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- Always hold the tool firmly in your hand(s) during the start-up. The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.
- Use clamps to support workpiece wherever practical. Never hold a small workpiece in one hand and the tool in other hand while in use. Clamping a small workpiece allows you to use your hand(s) to control the tool. Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the bit to bind or jump towards you.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.

- After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment device are securely tightened. Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.
- Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.
- Use only wheel types that are recommended for your power tool and only for recommended applications. For example: do not grind with the side of a cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to chatter.
- Do not "jam" the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Over stressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.
- Do not position your body in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.
- When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.
- Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

- Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.
- Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper. Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc or kickback.
- Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush. The wire bristles can easily penetrate light clothing and/or skin.

## ATTENTION!!!

The returns will be impossible if products were damaged because of incorrect use.

## **DISPOSAL:**



The packaging material is reusable. Dispose of the packaging in an environmentally friendly way by putting it in the appropriate recyclable waste collection containers. Dispose of the product and the batteries in view of the environment if you want to separate. The device and the batteries must not be thrown in with domestic waste.

Take them to a recycling center for used electrical and electronic devices. For more information you can consult your local government. Remove batteries first.

Eurotops Versand GmbH Elisabeth-Selbert-Straße 3 40764 Langenfeld, Germany



If technical support is needed, please call ...

in Germany

0180 . 530 63 63\* or info@eurotops.de
in Austria
0720 204 001 or info@eurotops.at
in Switzerland
071/27 4 68 06 or info@eurotops.ch
in the Netherlands
020262 1958 or info@eurotops.nl
in France
0892 . 700 470\*\* or info@eurotops.fr
in Belgium
070 663 665\*\*\* or info@eurotops.be

- \* 14 Cents/minute via German landline, max. 42 cents/minute via mobile phone network
- \*\*35 Cents/minute via French landline
- \*\*\*30 Cents/minute via Belgium landline

A possible return of products should be addressed to the return address stated on your invoice.

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