### **PMTS 10-20V**





### ROTEC

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#### Notes regarding the instructions

#### **Symbols**



#### Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



#### Warning of explosive substances

This symbol indicates dangers to the life and health of persons due to potentially explosive substances.



#### Warning of hot surface

This symbol indicates dangers to the life and health of persons due to hot surface.



#### Warning of sharp object

This symbol indicates dangers to the life and health of persons due to pointed objects.



#### Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



#### Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

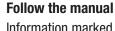
#### Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



#### Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



Information marked with this symbol indicates that the instructions must be observed.



#### Wear hearing protection

Information marked with this symbol indicates that you should wear hearing protection.



#### Wear safety glasses

Information marked with this symbol indicates that you should wear eye protection.



#### Wear a protective mask

Information marked with this symbol indicates that you should wear a protective mask.



#### Wear protective clothing

Information marked with this symbol indicates that you should wear protective clothing.



#### Wear protective gloves

Information marked with this symbol indicates that you should wear protective gloves.

You can download the current version of the instructions via the following link:



PMTS 10-20V



https://hub.trotec.com/?id=41429

#### Safety

#### **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 mainsoperated (corded) power tool or battery-operated (cordless) power tool.

## General Power Tool Safety Warnings – Work area safety

- Keep work area clean and well lit. Clutter or dark areas invite accidents.
- Do not operate power tools in explosive atmosphere, 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.

## General Power Tool Safety Warnings – 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.



#### General Power Tool Safety Warnings – 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 used for appropriate conditions will reduce personal injuries.
- 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.
- 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.
- 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.



## General Power Tool Safety Warnings – 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.

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- 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.

## General Power Tool Safety Warnings – Battery tool use and care

- Recharge only with 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.
- Use power tools only with specifically designed battery packs. Use of any other battery packs may create a risk of injury and fire.
- 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.

- 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.
- Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outsides the specified range may damage the battery and increase the risk of fire.

## General Power Tool Safety Warnings – Charger use and care

- This charger can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Never insert non-rechargeable batteries into the charger. A charger that is suitable for one type of battery pack may create a risk of fire and explosion, when used with another battery pack or non-rechargeable batteries.
- Only charge the Li-lon battery
  "Multiflex 20 2.0 DC" (capacity of 2.0 Ah = 5 battery
  cells) with the charger "Multiflex 20 2.0 AC". The battery
  voltage must match the battery charging voltage of the
  charger.



### General Power Tool Safety Warnings – 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.
- Never service damaged battery pack. Service of battery packs should only be performed by the manufacturer or authorized service providers.



### Safety warnings for multi-function tools

- Hold the power tool by its insulated gripping surfaces when performing an operation where the insertion tool may contact hidden wiring. Contacting a live wire might energize exposed metal parts of the device and lead to an electric shock.
- Only use the power tool for dry sanding. Water entering an electrical appliance increases the risk of electric shock.



#### Warning

#### Fire hazard! Avoid overheating of the material to be sanded and the sander. Before taking work breaks always empty the dust container.

Unfavourable conditions such as flying sparks when sanding metal render abrasive dust in the dust bag, micro filter, paper bag (or in the filter bag or filter of the vacuum cleaner) prone to self-ignition. The risk is particularly high when the abrasive dust is mixed with residues of paint, polyurethane or other chemical substances and the sanding material is hot after a longer period of work.

- Keep your hands out of the sawing area. Do not reach underneath the workpiece. Risk of injury upon contact with the saw blade.
- Use appropriate detection equipment to track down concealed supply lines or consult the local utility companies. Contact with electrical lines may result in fire and electric shock. Damaging a gas line may lead to an explosion. Penetrating a water line causes property damage and may cause an electric shock.
- During operation hold onto the power tool with both hands and make sure you stand firmly on the ground. It is safer to handle the power tool with two hands.
- Use the anti-vibration handle supplied with the device. Losing control of the power tool may result in personal injury.
- Secure the workpiece. The grip of tensioning devices or a vice is more secure than holding the workpiece only by hand.



Wear protective gloves when changing the insertion tools. The applied tools heat up during longer operation.

- Do not scrape moistened material (e.g. wallpaper) and not on moist subsurfaces either. Water entering a power tool will increase the risk of electric shock.
- Do not treat the surface to be processed with liquids containing solvents. Toxic fumes may be produced during scraping owing to the heat-up of the materials.
- Exercise particular caution when using scraper and cutter. These tools are especially sharp involving a risk of injury.
- Ensure sufficient ventilation when processing plastics, paints, varnishes etc.
- Wait until the device has come to a standstill, before putting it down.

#### Intended use

Only use the device PMTS 10-20V:

- For sawing and cutting
  - Wood
  - Plastic
  - Plaster
  - Non-ferrous metals
  - Fixing elements
  - (e.g. screws, nails, clamps etc.)
  - For processing soft wall tiles
- For sanding and scraping of small, dry areas

whilst adhering to the technical data.

We recommend using the power tool with original Trotec accessories.

#### Foreseeable misuse

Do not use the device PMTS 10-20V for:

- cutting up tiles
- sawing large screws or stainless steel
- processing workpieces requiring a continuous water supply

Only use the device in weatherproof surroundings.

Any other use than the one described in the chapter "Intended use" is regarded as reasonably foreseeable misuse.

#### **Personnel qualifications**

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the instructions, especially the Safety chapter.

#### Safety signs and labels on the battery and the charger

#### Note

Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition. The following safety signs and labels are attached to the battery:



ax 45 °C

Warning of explosion risk! These symbols indicate the following: Do not expose the battery pack or tool to fire or excessive temperature! Do not let the battery come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!

Never charge the battery at ambient temperatures below 10 °C or above 45 °C. Charging improperly or at temperatures outsides the specified range may damage the battery and increase the risk of fire.



### Observe the correct disposal of the battery!

This symbol indicates the following:

Ensure that the battery is disposed of correctly and never dispose of it in waste water or public waters. The battery contains irritating, caustic and toxic substances that pose significant risks to people and the environment.

The following safety signs and labels are attached to the charger:



This symbol indicates the following:



Read the instructions or operating manual before charging the battery.



This symbol indicates the following:

Only use the charger for charging the battery in dry interior spaces. Do not charge the device outdoors.

#### Personal protective equipment



#### Wear hearing protection.



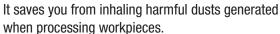
Excessive noise can lead to hearing loss.

#### Wear eye protection.

With it you protect your eyes from splintering, falling and flying pieces which could cause injuries.



#### Wear a protective mask.





#### Wear protective gloves.

They protect your hands from burns, crushing injuries and skin abrasions.

#### Wear tight-fitting protective clothing.

This protects you from the draw-in and entanglement hazard posed by rotating parts.

#### **Residual risks**



#### Warning of electrical voltage

Electric shock from insufficient insulation. Check the device for damages and proper functioning before each use.

If you notice damages, no longer use the device. Do not use the device when the device or your hands are damp or wet!



#### Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



#### Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket and the battery from the device! Hold onto the mains plug while pulling the power cable out of the mains socket.



#### Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing! Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.



#### Warning of explosive substances

Do not expose the battery to temperatures above 45 °C! Do not let the battery come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!



#### Warning of hot surface

The insertion tool might still be hot after the application. Burn hazard when touching the insertion tool.

Do not touch the insertion tool bare-handed! Wear protective gloves!



#### Warning of sharp object

Parts of the saw blade are sharp. Risk of injuries if handled without due care. Wear protective gloves!



#### Warning Toxic dusts!

The harmful / toxic dusts produced during operation pose of risk to the health of the operator and persons in the vicinity.

Wear eye protection and a dust mask!

#### Warning

Do not process materials containing asbestos. Asbestos is considered carcinogenic.



#### Warning

Make sure not to hit power, gas or water lines when working with a power tool.

If necessary, use a pipe detector to check the wall you want to drill in or slit open.



#### Warning

Risk of injuries caused by flying parts or bursting tool heads.



#### Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



#### Warning

The device is not a toy and does not belong in the hands of children.



#### Warning

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.

#### Caution

Vibration emissions can cause a health hazard if the device is used for an extended period of time or if it is not properly handled and maintained.



#### Caution

Keep a sufficient distance from heat sources.

#### Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

## Behaviour in the event of an emergency / emergency stop function

#### Emergency stop:

Removing the battery results in the function of the device stopping immediately. Leave the battery out in order to secure the device against accidental switch-on.

Behaviour in the event of an emergency:

- 1. Switch the device off.
- 2. In the event of an emergency, remove the battery from the device: Hold the release button of the battery and pull the battery off the device as described in chapter "Removing the battery".
- 3. Do not insert the battery if the device is defective.

#### Information about the device

#### **Device description**

Using the wireless multi-function tool PMTS 10-20V, no additional power connection is required at your workplace.

Up to 19,000 times per minute the insertion tool moves to and fro by 3.2° owing to the oscillating drive. This guarantees precise working in a very confined space.

The integrated oscillation rate selection permits an optimally adjusted exertion of force for each application.

Using the quick-release system you can exchange accessories without tools in a matter of seconds.

The anti-vibration handle ensures optimum guidance and vibration-damped working.

It is suited particularly well for working close to or lined up with the edge.

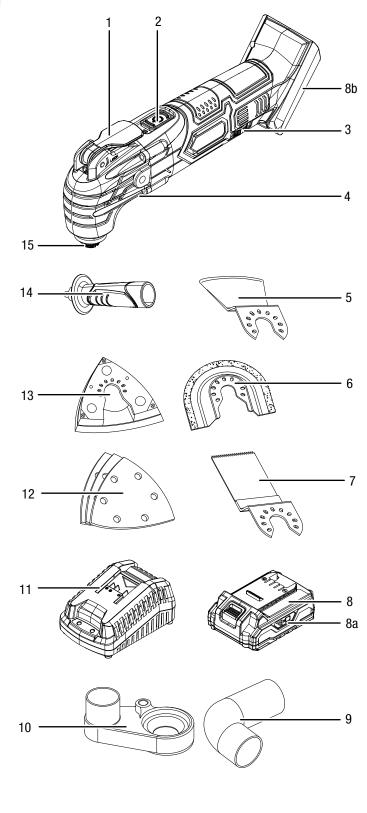
To avoid an excessive formation of dust and dirt during grinding work, simply connect the convenient dust extraction system (included in the scope of delivery) to a vacuum cleaner.

The integrated LED work light offers an improved illumination of the workpiece or working surface.

The battery comes with its own battery level indication. As a result you can check the current charging status without having to connect it to the device.

For yet more application possibilities you can of course combine your multi-function tool with further accessories, e.g. the original Trotec accessory set for bathroom restoration.

#### **Device depiction**



No.	Designation		
1	Tool release lever		
2	On/off switch		
3	Setting wheel for oscillation rate selection		
4	LED work light		
5	Scraping knife HCS SC 80/31 for removing tile adhesive, silicone, mortar, paint residues		
6	Diamond saw blade T65		
7	Plunge-cut saw blade HCS CS 95/41 for wood and plasterboard		
8	Battery		
8a	Battery level indication		
8b	Battery holder		
9	Elbow		
10	Dust extraction		
11	Quick charger		
12	Velcro <sup>®</sup> -backed triangle sandpaper (3 x wood, 3 x metal)		
13	Delta sanding plate		
14	Anti-vibration handle		
15	Tool holder with clamping screw		

#### Scope of delivery

- 1 x Multi-function tool PMTS 10-20V
- 1 x Rechargeable battery
- 1 x Quick charger
- 1 x Diamond saw blade T65 for tiles
- 1 x Plunge-cut saw blade HCS CS 95/41 for wood and plasterboard
- 1 x Scraping knife HCS SC 80/31 for removing tile adhesive, silicone, mortar, paint residues
- 6 x Velcro<sup>®</sup>-backed triangle sandpaper (3 x wood, 3 x metal)
- 1 x Delta sanding plate
- 1 x Dust extraction
- 1 x Elbow
- 1 x Anti-vibration handle
- 1 x Transport case
- 1 x Manual

#### **Technical data**

Parameter	Value				
Model	PMTS 10-20V				
Nominal voltage	20 V				
Rated no-load speed	5,000 – 19,000 rpm				
Oscillation angle	3.2°				
Weight	1.25 kg				
Battery	Multiflex 20 – 2.0 DC				
Туре	Li-ion				
Nominal voltage	20 V				
Nominal capacity	2.0 Ah				
Rechargeable cells	5 cells				
Capacity	40 Wh				
Quick charger	Multiflex 20 – 2.0 AC				
Input					
Nominal voltage	230 – 240 V / 50 Hz				
Power input	65 W				
Output					
Nominal voltage	21.5 V <del></del>				
Charging current	2.4 A				
Fusing	3.15 A (slow-blowing)				
Charging time	1 h				
Cable length	1.5 m				
Protection class	II (double insulation) / 回				
Vibration information according to EN 62841					
Total vibration emission value:					
Vibration emission value $a_h$ at the device handle	20.2 m/s <sup>2</sup>				
Uncertainty K	1.5 m/s <sup>2</sup>				
Sound values according to EN 62841					
Sound pressure level	71 dB (A)				
Sound power level	82 dB (A)				
Uncertainty K	3 dB				



#### Wear hearing protection.

Excessive noise can lead to hearing loss.

#### Information on noise and vibration:

- The specified total vibration and noise emission values were measured by means of a test procedure standardized in EN 62841 and can be consulted for the comparison of one power tool with another.
- The specified total vibration **and noise emission values** can also be used for preliminary load assessment.

#### Caution

Vibration emissions can cause a health hazard if the device is used for an extended period of time or if it is not properly handled and maintained.

 The actual vibration and noise emission may differ from the stated values during operation of the power tool. This depends on how the power tool is used and especially on the type of workpiece being processed. Try to keep the vibration load to a minimum. Exemplary measures for reducing the vibration load include wearing gloves during operation of the tool and the limitation of working hours. All parts of an operating cycle must be considered for this (e.g. times at which the power tool is switched off and times when it is switched on but runs without load).

#### **Transport and storage**

#### Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

#### Transport

For transporting the device, use the transport case included in the scope of delivery in order to protect the device from external influences.

Before transporting the device, observe the following:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- Allow the device to cool down.
- Remove the battery from the device.
- Remove the tool from the tool holder.
- If attached, disconnect the dust extraction system from the device.

The supplied Li-ion batteries are subjects to the requirements of dangerous goods legislation.

Observe the following when transporting or shipping Li-ion batteries:

- The user may transport the batteries by road without any additional requirements.
- If transport is carried out by third parties (e.g. air transport or forwarding company), special requirements as to packaging and labelling must be observed. This includes consulting a dangerous goods specialist when preparing the package.
  - Only ship batteries if their housing is undamaged.
  - Mask open terminals with tape and pack the battery in a way that it cannot move inside the packaging.
  - Please also observe any other national regulations.

#### Storage

Before storing the device, proceed as follows:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- Allow the device to cool down.
- Remove the battery from the device.
- Remove the tool from the tool holder.
- If attached, disconnect the dust extraction system from the device.
- Clean the device as described in the Maintenance chapter.
- For storing the device, use the transport case included in the scope of delivery in order to protect the device from external influences.
- Do not store Li-ion batteries which are completely discharged. Storing discharged batteries can lead to a deep discharge and thus damage the battery.

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- Ambient temperature below 45 °C
- Protected from dust and direct sunlight inside the transport case

#### Start-up

#### **Unpacking the device**

• Take the transport case out of the packaging.



#### Warning of electrical voltage

Electric shock from insufficient insulation. Check the device for damages and proper functioning before each use.

If you notice damages, no longer use the device.

Do not use the device when the device or your hands are damp or wet!

• Check the contents of the transport case for completeness and look for damages.



#### Warning Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.

• Dispose of the packaging material according to the national regulations.

#### Charging the battery

#### Note

The battery can be damaged in case of improper charging.

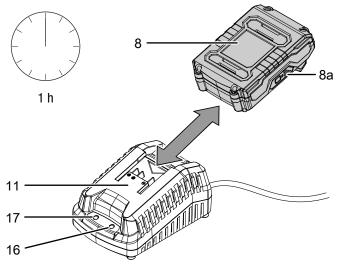
Remove the charger's mains plug before inserting or removing the battery.

Never charge the battery at ambient temperatures below 10 °C or above 40 °C.

The battery is partially charged upon delivery to avoid damage to the battery caused by a deep discharge.

Prior to initial start-up and when the battery is low (only the red LED in the battery level indication (8a) is illuminated), the battery should be charged. To do so, please proceed as follows:

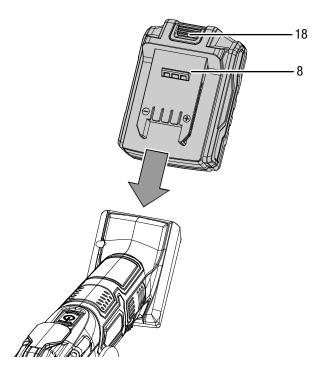
1. Slide the battery (8) onto the quick charger (11) as depicted until the battery locks in place.



- 2. Insert the mains plug of the quick charger (11) into a properly fused mains socket.
  - $\Rightarrow$  The red battery LED (16) lights up.
  - $\Rightarrow$  Charging requires approx. one hour.
- 3. Wait until the red battery LED (16) goes off and the green battery LED (17) lights up.
  - $\Rightarrow$  The battery (8) is fully charged.
- 4. Hold onto the mains plug while pulling the power cable of the quick charger (11) out of the mains socket.
  - ⇒ The battery (8) and the quick charger (11) may have become warm during charging. Allow the battery (8) to cool down to room temperature.
- Take the battery (8) out of the quick charger (11) by pressing and holding the release button (18) and pulling the battery (8) off the quick charger (11).

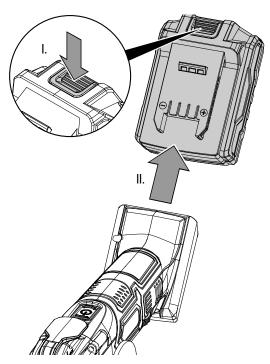
#### Inserting the battery

1. Slide the battery (8) onto the device until it locks in place.



#### Removing the battery

1. Detach the battery (8) from the device by pressing and holding the unlocking button (18, I.) and pulling the battery off the device (II.).



2. If required, charge the battery (8) as described in the section *Charging the battery*.

#### Checking the battery charging status

The battery comes with an integrated battery level indication.

The battery status is displayed as follows by the three LEDs of the battery level indication (8a):

LED colour	Meaning	
Green – Orange – Red	maximum charge / power	
Orange – Red	medium charge / power	
Red	weak charge – recharge the battery.	

- 1. Press on the battery icon (19) on the battery (8).
  - ⇒ You can read the battery status from the battery level indication (8a).



#### Mounting the handle



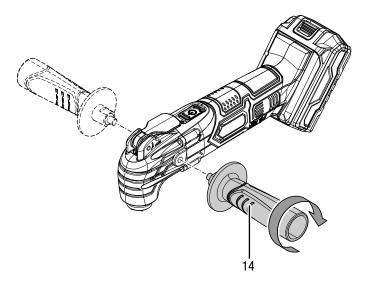
#### Info

Use the supplied anti-vibration handle for safe and precise guiding.

The anti-vibration handle (14) should be mounted before start-up.

To do so, please proceed as follows:

1. Screw the anti-vibration handle (14) clockwise into the threading either to the left- or right-hand side of the housing.



- 2. Check the anti-vibration handle (14) for tight fit.
- 3. For the disassembly unscrew the anti-vibration handle (14) counter-clockwise.

#### Tool change



#### Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket and the battery from the device! Hold onto the mains plug while pulling the power cable out of the mains socket.



#### Wear protective gloves

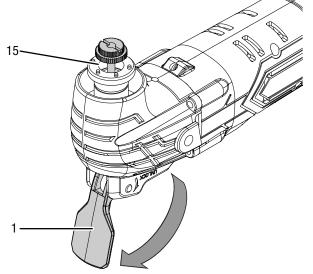
Wear appropriate protective gloves when inserting or exchanging tools.



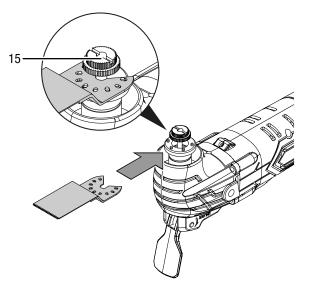
If need be, connect the dust extraction system before the tool change.

1. Complete open the tool holder by means of the tool release lever (1).

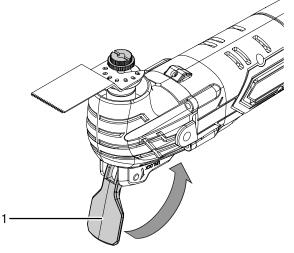
2. Remove the tool from the tool holder (15), if any.



3. Insert the required tool in the tool holder (15). The insertion tools can be installed in the tool holder (15) in variable working directions.



4. Complete close the tool holder by means of the tool release lever (1).



5. Check whether the tool is properly locked in place.



#### Info

The tools included in the scope of delivery are openend tools.

Customary closed-end tools may, however, be used.

#### Tool change with a closed end

If you use insertion tools with a ring-shaped end, the clamping screw needs to be removed for tool change.



#### Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket and the battery from the device! Hold onto the mains plug while pulling the power cable out of the mains socket.



#### Wear protective gloves

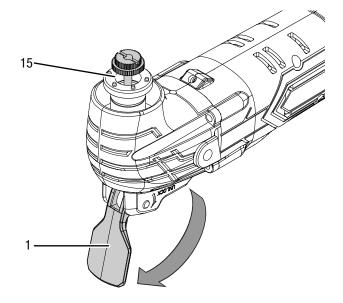
Wear appropriate protective gloves when inserting or exchanging tools.



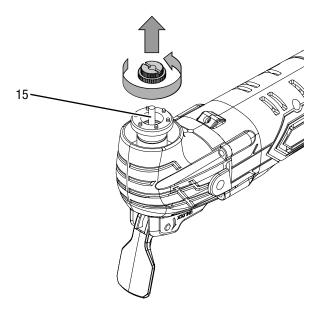
#### Info

If need be, connect the dust extraction system before the tool change.

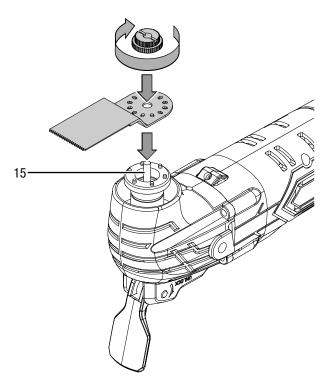
- 1. Complete open the tool holder by means of the tool release lever (1).
- 2. Remove the tool from the tool holder (15), if any.



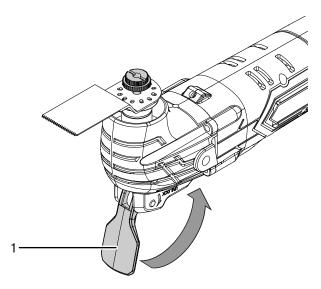
3. Detach the clamping screw from the tool holder (15) by turning it counter-clockwise.



- 4. Insert the required tool in the tool holder (15).
- 5. Affix the clamping screw to the tool holder (15) by turning it clockwise.



6. Complete close the tool holder by means of the tool release lever (1).

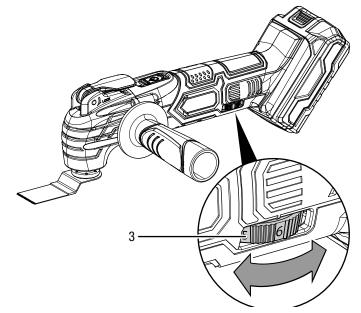


7. Check whether the tool is properly locked in place.

#### **Oscillation rate selection**

The required oscillation rate depends on the material and the operating conditions and can be determined by way of field-testing. For sawing, cutting and grinding harder materials such as wood or metal we recommend oscillation rate **6**, in case of softer materials, e.g. plastics, best use oscillation rate **4**. The setting range covers the levels 1 - 6 (5,000 - 19,000 rpm). You can change the preselected oscillation rate at any time.

1. Turn the setting wheel (3) to the desired oscillation rate.



#### **Operation**

#### Tips and notes on handling the multi-function tool

General information:

- Keep the venting slots clear to prevent the motor from overheating.
- Check the tool in the tool holder for proper fit before every application. The tool must be firmly locked in place in the designated holding fixtures in the tool holder.
- Before every application, make sure that you have selected the correct tool for the intended use.

#### Sawing:

- Only use intact, flawless saw blades. Bent, blunt or otherwise damaged saw blades could break.
- When sawing lightweight construction materials, make sure to observe the legal regulations and recommendations of the material manufacturers.
- Only soft materials such as plasterboard or the like may be processed using the plunge-cutting method!
- Before sawing wood, chipboards, building materials etc. with HCS blades, check the above for foreign objects, e.g. nails, screws or similar. If required, remove the foreign objects or use bi-metal saw blades.
- Use a narrow saw blade when sawing tight curves.
- The saw blade should not be longer than required for the intended cut.

Cutting:

- Only use intact, flawless cutting blades. Bent, blunt or otherwise damaged cutting blades could break.
- When cutting wall tiles, bear in mind that the insertion tools are subjected to a high level of wear during longer operation.

#### Scraping:

- Choose a high oscillation rate for scraping.
- On soft ground (e.g. wood) work at a shallow angle and with only little contact pressure. Otherwise the scraping knife could cut into the ground.

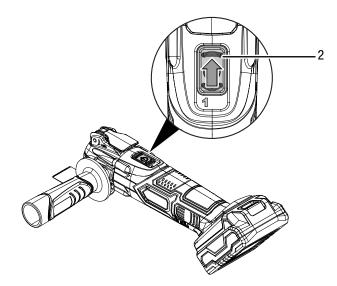
#### Sanding:

- Maintain a consistent grinding pressure to increase the lifetime of the sanding sheets.
- Choose from the different sanding sheets (red for wood, black for metal) in due consideration of the material to be processed and the desired surface abrasion.
- Avoid the accumulation of dust at the workplace, always use a dust extraction system when grinding.
- Use the coarse triangular sanding sheets (e.g. 60 grit) for rough grinding and the fine ones (e.g. 240 grit) for fine and finish grinding.

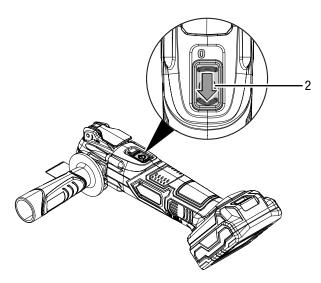
#### Switching the device on and off

Wear your personal protective equipment when working with the device.

- 1. Check whether the fixed tool and the set oscillation rate are suitable for the intended application.
- 2. Check whether the workpiece is secured and the worktop prepared correspondingly.
- 3. To switch the device on, push the on / off switch (2) forward so that the **1** becomes visible.
  - $\Rightarrow$  The LED work lamp is illuminated.



- 4. To switch the device off, push the on / off switch (2) to the rear so that the **0** becomes visible.
  - $\Rightarrow$  The LED work lamp goes out.



#### **Operating mode: Sawing / cutting**

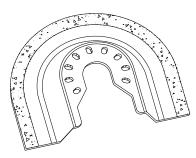
For separating and plunge-saw cuts in wood, plastic, plaster and other soft materials as well as for sawing close to the edge – also in poorly accessible areas.

• Use the plunge-cut saw blade HCS CS 95/41.



For separating and plunge-saw cuts in tiles or other harder materials.

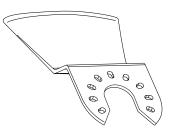
• Use the diamond saw blade T65.



#### **Operating mode: Scraping**

For removing material residues, e.g. tile adhesive when replacing damaged tiles, and for treating any remainders of mortar / concrete, tile / carpet adhesives, paint or silicone residues.

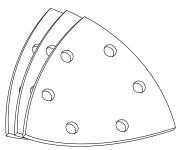
• Use the scraping knife HCS SC 80/31.



#### **Operating mode: Sanding**

For sanding wood and metal, removing paints and varnishes, smoothing various surfaces.

• Use the delta sanding plate with suitable sandpaper.

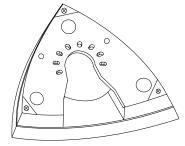


#### **Applying sandpaper**

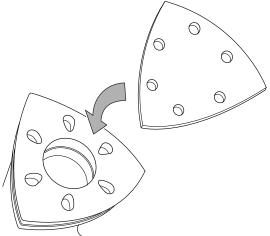
The delta sanding plate is provided with a hook-and-loop fastening system so as to allow a quick and easy attachment of Velcro®-backed sanding sheets.

Please proceed as follows to attach the sandpaper to the sanding plate:

- 1. Tap off the dust from the sanding plate's hook-and-loop fabric to ensure optimum adhesion.
- 2. Mount the delta sanding plate to the tool holder.



- 3. Place the sandpaper with its smooth bottom side on the delta sanding plate so that it fits exactly.
  - $\Rightarrow$  The six holes should be aligned precisely.



- 4. Firmly press the sandpaper down.
- 5. To change or remove the sandpaper, pull it off from one corner towards the opposite side.

#### Mounting the dust extraction system

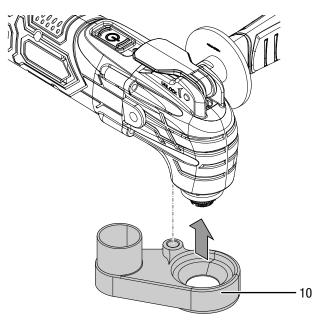
Avoid the accumulation of dust at the workplace, always use the dust extraction system when grinding.



#### Caution

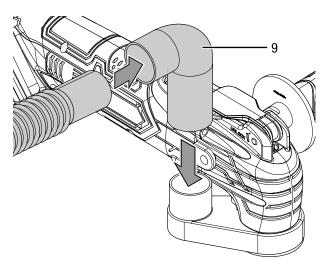
Use a special vacuum cleaner to suck off harmful or toxic materials.

- 1. Fasten the dust extraction system to the device before inserting a tool.
- 2. Put the dust extraction system (10) on the device.
- 3. Screw the dust extraction system (10) to the device.



4. Push the elbow (9) onto the dust extraction system (10).

5. Connect a suitable vacuum cleaner (e.g. industrial vacuum cleaner) to the elbow (9). If anything is unclear or if you have questions, please contact the manufacturer of your vacuum cleaner.



#### Shutdown

<u>/</u>}

#### Warning of electrical voltage

- $\frac{1}{2}$  Do not touch the mains plug with wet or damp hands.
- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- If required, allow the device to cool down.
- Remove the battery from the device (see Start-up chapter).
- Remove the tool from the device (see Start-up chapter).
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and storage chapter.

#### **Available accessories**



#### Warning

Only use accessories and additional equipment specified in the instructions.

Using insertion tools or accessories other than those specified in the instructions may cause a risk of injury.

Accessories	Article number
Accessory kit 1 Universal	6.210.000.101
comprising:	
1 x scraping knife HCS SC 80/30 for	
removing tile adhesive, silicone, mortar	
and paint residues	
1 x segment saw blade HSS SM 85/20 for	
wood and metal	
1 x plunge-cut saw blade BIM CS 75/25	
for wood, plastic, GRP, light metal and	
non-ferrous metal	
1 x plunge-cut saw blade HCS CS 95/40	
for wood, plasterboard and soft plastics	
20 sheets of Velcro <sup>®</sup> sanding triangles for	
wood:	
4 sheets each of grit 60/80/100/120/240	
Accessory kit 2 Bathroom restoration <sup>1</sup>	6.210.000.102
comprising:	
1 x diamond saw blade T64 for milling out	
joints	
1 x RIFF grinding plate T79 for grinding off	
tile adhesive, mortar and carpet adhesive	
residues 1 x scraping knife HCS SC 80/30 for	
removing tile adhesive, silicone, mortar	
and paint residues	
10 sheets of Velcro <sup>®</sup> sanding triangles for	
wood:	
2 sheets each of grit 60/80/100/120/240	
Spare battery Multiflex 20 – 2.0 DC	6.200.000.303

<sup>1</sup> The tool in accessory kit 2 Bathroom restoration has a closed end. To install the attachment pieces, the clamping screw needs to be detached as described in *Tool change with a closed end*.

#### **Errors and faults**

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

Troubleshooting tasks which require the housing to be opened must only be carried out by an authorized specialist electrical company or by Trotec.

#### Light smoke or odour is emitted during the first use:

• This is not a fault. These phenomena disappear after a brief runtime.

#### The battery does not charge:

• Check whether the battery is inserted correctly in the quick charger.

Slide the battery into the quick charger in a way that the battery terminals engage in the quick charger. The battery must lock in place in the quick charger.

- Check the power connection.
- Check the power cable and mains plug for damage.
- Check the on-site fusing.
- Check the quick charger for damage. If the quick charger is damaged, stop using it. Contact the Trotec customer service.
- Check the battery terminals for dirt. Remove any dirt.
- The battery might be defective and have to be replaced. Only use batteries of the same type.

#### The device does not start:

- The battery power might be too low. Recharge the battery.
- Check whether the battery is correctly connected to the device.

Slide the battery onto the device in a way that the battery terminals engage. The battery must lock in place in the device.

• Check the battery terminals for dirt. Remove any dirt.



#### Info

Wait for at least 10 minutes before switching the device back on.

#### The device becomes hot:

- Make sure not to exert too much pressure on the device during grinding.
- Select a low oscillation rate by turn down the setting wheel for oscillation rate selection (3).
- Check whether the tool is suitable for the tasks to be carried out.
- Keep the venting slots clear to prevent the motor from overheating.



Wait for at least 10 minutes before switching the device back on.

#### The tool is loose:

- Make sure that the tool is firmly locked in place in the designated recesses of the tool holder.
- Make sure that the clamping screw at the tool holder is tightened properly.
- Make sure that the tool release lever is folded back completely.

# The saw blade experiences difficulties plunge-cutting the material to be processed or the sawing/grinding performance is insufficient:

- Check the set oscillation rate, it must be suitable for both the tool and the material.
- To select a higher oscillation rate, turn up the setting wheel for oscillation rate selection 3.
- If the saw blade is worn, replace it with a new one.
- Check whether the chosen tool is suitable for the material to be processed.

#### Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

## The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

#### Maintenance

#### Activities required before starting maintenance

#### Warning of electrical voltage



- Do not touch the mains plug or the battery with wet or damp hands.
- Switch the device off.
- Allow the device to cool down completely.
- Remove the battery from the device.



#### Warning of electrical voltage

Maintenance tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.

#### Notes on maintenance

Inside the device, there are no parts that need to be maintained or lubricated by the user.

#### Safety signs on the battery and the charger

Check the safety signs attached to the battery and the charger at regular intervals. Replace illegible safety signs!

#### Cleaning

The device should be cleaned before and after each use.

#### Note

The device does not have to be lubricated after cleaning.



#### Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!

Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.

- Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.
- Dry the device with a soft, lint-free cloth.
- Dry the bits with a soft, lint-free cloth.
- Remove any abrasive dust and, if applicable, wood chips from the tool holder.
- Regularly clean the delta sanding plate by tapping it out for a better adhesion of the sandpaper.
- Use a wire brush to clean the RIFF tools (available accessories).
- Keep the connecting terminals on the device and charger clean.
- Keep the connecting terminals on the battery pack clean.
- Keep the ventilation openings free from dust deposits to prevent overheating of the motor.
- Remove dust and chips from the chip ejector. If the chip ejector is blocked, clean it with suitable means (e.g. compressed air).

#### Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website https://hub.trotec.com/?id=45090. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.



In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

#### **Declaration of conformity**

Declaration of conformity in accordance with the EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A

We – Trotec GmbH – declare in sole responsibility that the product designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / Product: PMTS 10-20V

Product type: cordless multi-function tool

Year of manufacture as of: 2021

#### **Relevant EU directives:**

- 2011/65/EU: 01/07/2011
- 2012/19/EU: 24/07/2012
- 2014/30/EU: 29/03/2014
- 2015/863/EU: 31/03/2015

#### Applied harmonised standards:

- EN ISO 12100:2010
- EN 62841-1:2015
- EN 62841-2-4:2014

#### Applied national standards and technical specifications:

- EN IEC 55014-1:2021
- EN IEC 55014-2:2021

### Manufacturer and name of the authorised representative of the technical documentation:

Trotec GmbH Grebbener Straße 7, D-52525 Heinsberg Phone: +49 2452 962-400 E-mail: info@trotec.de

Place and date of issue: Heinsberg, 15.12.2021

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