POWERhandle AC

User Manual

PHAC

THANK YOU

Thank you for investing in a CEL product. The POWERhandle AC has been engineered and made to demanding high quality standards; ease of operation and safety have taken a major role in development. Proper care of your product will give you years of trouble-free use.

Normal wear and tear, including accessory wear, is not covered under guarantee. The product is guaranteed for **domestic use** against manufacturing faults for a period of **24 months** (for additional guarantee period (if any) please refer to the store or agent from which you purchased the product or contact the nearest authorized dealer). This product is not guaranteed for HIRE purposes.

It is possible to download updated user manuals, view demonstration videos and find information about new products at: **www.cel-global.com**

If you experience any problems with the product please contact

email: service@cel-global.com
CEL UK: +44 8453 88 97 69
CEL US: +1 800-233-7592
www.cel-global.com

Warning: User must read and understand the user manual before using the product to reduce the risk of injury. Failure to follow all instructions may result in electric shock, fire and/or serious personal injury. The product must be used only for its prescribed purpose. Any use other than those mentioned in this manual will be considered a case of misuse. The manufacturer shall NOT be liable for any damage or injury resulting from such cases of misuse, use of force, partially or completely dismantled appliances.

RoHS COMPLIANT 2002/95/EC

Intertek 4000879

PRI: 230V ~ AC 50Hz 140W t_a 40°C
SEC: 23V ⎓ 5A

Contents

Made in China
Designed in UK

RISK OF SHOCK,The PHAC may give a dangerous electrical shock even when not plugged in.
Do not connect the product in any way not other than as described in this manual, this transformer can give a dangerous electric shock if any electrical contacts are damaged, joined incorrectly or touched.

Description of symbols
The rating plate and labels on your product may show symbols. These represent important information about the product or instructions on its use.


General Hazard


Read Instructions


Risk of Shock


Protect Eyes, Ears, Lungs


Keep Bystanders Away


Flying Debris


Keep Dry


Wear Appropriate Clothing

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 terms “tool”, “machine” or "power tool" in the warnings refers to mains-operated (corded) and battery-operated (cordless) power tools, their accessories and power supplies.

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 and their accessories 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.
Electrical safety
a) Power tool plugs must match the outlet. Never modify the plug in any way. Check the voltage on the rating label of the tool matches the voltage of the mains output before plugging in. Do not use any adapter plugs or converters with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
b) Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
c) Don’t 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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of cord suitable for outdoor use reduces the risk of electric shock.
Personal safety
a) Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, and hearing protection must be used for appropriate conditions and will reduce personal injures.
c) Avoid accidental starting. Ensure switches are in the off-position before plugging in. Carrying tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
d) Remove adjusting key or wrench before turning the tool on. A wrench or a key left attached to a moving part of the 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 appropriately. 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 these devices can reduce dust-related hazards.

Power tool use and care

a) Do not force or overload 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.

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.

NOTE

~ Always unwind all cables completely, including extension leads and especially extension drum reels.
~ Always check the tool and all cables and connections are undamaged, clean and dry before plugging in.
~ Always use an RCD or suitable circuit breaker when using power tools.
~ Use the transformer only for dry work. Penetration of water into the machine increases the risk of an electric shock.
~ Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance. Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
~ Secure the workpiece. A workpiece clamped with clamping devices or in a vice is held more securely than by hand.
~ Keep your workplace clean. Blends of materials are particularly dangerous. Dust from light alloys can burn or explode.
~ Wear protective gloves when changing application tools/accessories. Application tools/accessories become hot after prolonged usage.
~ Do not treat the surface to be worked with solvent-containing fluids. Materials being warmed up by the friction can cause toxic vapours to develop.
~ Never work in an area you cannot clearly see. Hidden objects can cause harm or be damaged.

Key risks with AC-DC transformers:

Even when disconnected from mains this product can give a powerful electric shock. Disconnect from mains power before removing tools and attachments from their plugs. Never touch any electrical contacts.

Repeatedly overloading or causing excessive load on the transformer will cause heat build up within the unit and in cabling. Do not use tools for work they were not designed to do, cordless tools are designed for light or brief work not for constant high drain tasks.

Cordless tools (DC or battery powered tools) are not designed for use over extended periods, rest your tools often and never leave them running when not in use. Doing so will cause excessive wear on motor brushes and other components causing failures and unnecessary danger.

Heavy components within the transformer will damage the outer casing if dropped. Take extra time and care when moving, fitting or removing the unit.

Always wear equipment to protect vision, hearing and lungs and suitable clothing and footwear. Long periods of use can be harmful, take regular breaks.

The content of your package may vary from this description and images within this manual.

NOTE

Due to modern mass production techniques, it is unlikely that this product is faulty or that a part is missing. If you find anything wrong, do not operate the product until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal Injury.

1	POWERhandle AC	Replacement code: PHAC-230 or PHAC-110 (230 or 110 DEPENDS ON LOCAL VOLTAGE)
2	Release Catch	
3	LED	
4	Vents	
5	Rails	
6	Locking Catches	
7	Mains AC input	
8	Rating Label	
9	Figure 8 cable	[Country]-F8
10	POWERhandle Extender	PHEX (OPTIONAL)
11	Multi Purpose Button	
12	Trigger	
13	Green Connector	
	This User Manual	

Rating Label.
Upon unpacking the box, inspect the rating label to ensure it is suitable for your local mains power supply.

Figure 8 cable with mains plug.
The included plug should match your local mains outlet. If not, contact your supplier immediately, do not substitute another plug as the product you have received may be designed for use in another country.

Read all safety warnings and all instructions.
Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Intended Use.
This AC-DC transformer is designed to provide 18V DC power to a selection of CEL POWER TOOLS. It may be possible to fit the transformer to other tools and outlets for which it was not intended. To ensure safe use only attach the POWERhandle AC as described in this user manual. Contact CEL if unsure.

Tool lifetime
To best maintain the life of your cordless power tools it is recommended to use them for short periods of time, deactivating whenever not in use. This will preserve motor brushes and other components designed for use over brief periods.

Before Starting Work 4.0

WARNING:
230 volt or 110 volt models can only be used on the mains voltage for which they were designed. They are not interchangeable.
DO NOT DROP THE PHAC, it's components are very heavy and the casing will break.
DO NOT USE IF DAMAGED IN ANY WAY, return to CEL or your point of purchase.
DO NOT USE IN DAMP CONDITIONS OR IF THE PRODUCT IS WET OR DAMP, High risk of shock! Never touch any metal contacts. Never open the case.

CHECK VENTS OFTEN.
FIRE RISK, do not cover any vents and keep work area clear of debris as this product has a cooling fan to disperse generated heat, debris may jam the fan or enter the product creating a fire hazard.
DO NOT CONNECT THE PHAC IN ANY WAY OTHER THAN DESCRIBED IN THIS MANUAL, this transformer will give a dangerous electric shock if any electrical contacts are damaged, joined incorrectly or touched. Contact CEL if you have any questions.
RISK OF SHOCK,The PHAC may give a dangerous electrical shock even when not plugged in.

Operation 5.0

NOTES:
Heavy, always use both hands while removing and carrying the PHAC as it is very heavy and may be damaged if dropped.

Balance, the PHEX is much lighter than a POWERhandle which contains batteries, this will affect the balance and handling characteristics of the tools. Take care to familiarise yourself with this difference before operating the tools.

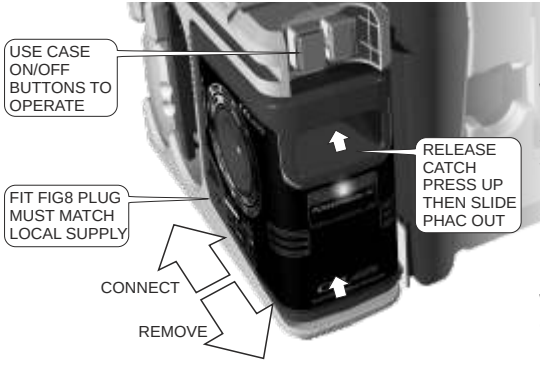
Cable, the PHEX has a trailing cable which can catch on protrusions or otherwise affect handling of the tool. Take extra care to manage this cable safely.

Release Catch, always use the release catch to disconnect the PHAC. Damage to the locking catches will inhibit safe operation.

Using the POWERhandle AC
Read all instructions and pay attention to all notes and warnings before plugging in the PHAC.
Always wear safety gear.
Be aware of electrical safety.
Secure all work pieces using clamps or a vice

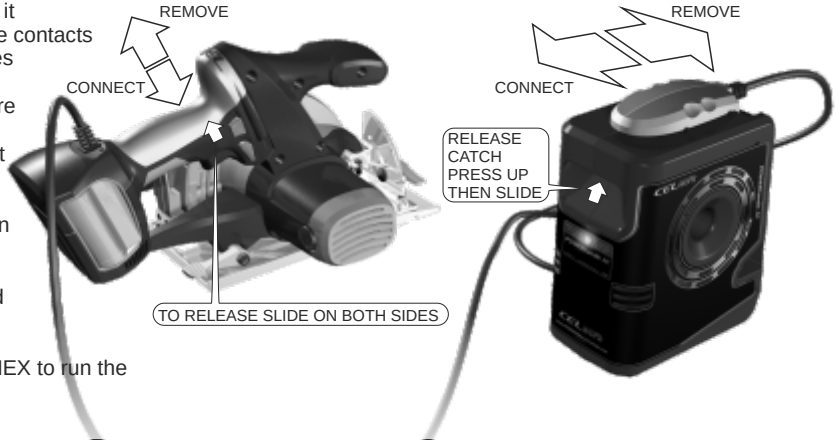
ALWAYS unwind all cables completely, including extension leads and especially extension drum reels.

LED indicator
GREEN LED indicates power on.
RED LED can indicate overloaded or jammed tools. In this case the LED will turn back to green after 10 seconds. Ensure the jam is removed before restarting the tool
RED LED may also indicate over temperature, turn off mains power and allow to cool.
WARNING. Repeatedly overloading the tools will cause heat buildup in cables and components, it will place tool components under stress and may cause failure.



Using the POWERhandle AC (PHAC)
Place the POWER8 case on a firm and secure surface.
Fit the tool you wish to use into the case in the normal way.
Fit the PHAC into the Dock of your POWER8 case in the same way you would fit a POWERhandle, the LED should be facing outward.
Press in firmly to ensure the locking catches “click” into position. Check the PHAC is secured in the case before proceeding, pulling the PHAC out of the case should not be possible without first operating the Release Catch.
Mark your cuts, secure your work with clamps or a vice. When you are prepared to make a cut.
Connect the figure 8 plug to the PHAC and connect the plug to a safe and suitable mains outlet.
Operate the tools as described in their user manuals.
Switch on and off using the ON/OFF buttons on the POWER8 case.

Using the POWERhandle Extender (PHEX)
Remove the PHAC from the POWER8 case.
Attach the green connector on the PHEX to the top of the PHAC by sliding it underneath the rails so that the contacts engage and the locking catches “click” into position.
Check it is securely fitted before proceeding.
Connect the PHEX handle part to the tool you wish to use by sliding it onto the rails, ensure the handle is securely locked in place before operating any controls.
Operate the tools as described in their user manuals.
Use the Multi Purpose Button and Trigger controls on the PHEX to run the tools.



NOTE, all power tools have a limited operational lifetime. DC (cordless) tools are designed to be used for short periods of time and should not be allowed to run continuously. Heat buildup and excessive wear on motor brushes will occur if tools are not deactivated after a short time. For larger jobs AC (corded) tools should be used as their motors are designed for use over extended periods.

The POWERhandle AC will mainly benefit those tasks that require the most work for your tools.
Cutting with a Circular Saw draws a lot of current from a battery, this unit can provide sufficient current at a stable voltage to complete tasks that may not be possible on a single charge of a battery.

Tools like cordless routers and surface planers also have short operating times when made to work hard. The PHAC has been designed to handle this increased workload.

Tools such as drills and jigsaws do not have such high power demands as those mentioned above. Drilling a large or deep hole in masonry with the hammer drill can use a lot of battery power so the POWERhandle AC can reduce the need for recharging.

The POWERhandle AC will provide high current to the tools allowing high but limited torque applications. By setting up work in a way which reduces load on the tools you can improve efficiency and tool life, as well as ensuring the automatic cutoff is not engaged.
Support overhanging material so it does not jam blades. Green or warped timber may also trap blades and cause overloading.

Maximum circular saw blade cutting efficiency is achieved by using the part of the blade closest to the sole plate when the blade is at its maximum cut distance.

It is important to keep the PHAC clean, this will ensure efficient work and longer lifetime. A dusty environment will gradually clog fan and heat sinks within the unit.

Don’t leave tools running for long periods as this will dramatically reduce their life time. Switch off when not in use.

To best protect your investment in CEL product we recommend you follow these guidelines:

If think of the POWERhandle AC as a very long life battery rather than an unlimited power source you will be less likely to over stress your tools or overheat the PHAC.

DON'T NEGLECT YOUR OTHER POWERhandles! The cells which make up the batteries within your other POWERhandles need to be refreshed regularly. A full charge>discharge cycle is recommended for all battery types, even Li-Ion will benefit from this.

Order spare brushes for aging tools, this will refresh the motor and give better efficiency and extended life.

Use your vacuum cleaner to suck dust and debris from ventilation slots.

Use sharp, new cutting tools of high quality. A new blade or drill bit will cut more precisely and efficiently. A circular saw blade with less teeth will cut faster, using less energy but will leave a rough finish. For clean smooth finishes a blade with more teeth is preferable.

Ensure metal parts are protected from corrosion by applying a very thin layer of machine oil with a rag.

WARNING, Switch off and unplug the power supply before carrying out any maintenance on the tool. Even when unplugged there is risk of shock from all metal contacts, do not touch them.

General inspection

Regularly check that all the fixing screws are present and tight. They may vibrate loose over time. Check all cables and wires, if there is any damage replace immediately.

Replacing the fuse

Country specific models may use a fuse suitable for the specific requirements of that region. The plug shows the type of fuse required, replace with an identical fuse with the same rating, remove from both the PHAC and any live electrical outlet before you open the plug and replace the fuse.

Dust and debris

Keep the tool 's air vents unclogged and clean at all times.

Remove dust and dirt regularly.

Cleaning is best done with compressed air or a rag. Never use caustic agents to clean plastic parts.

CAUTION, Do not use cleaning agents to clean the plastic parts of the tool. A mild detergent on a damp cloth is recommended. Water must never come into contact with an active tool.

Storage

Store the tool, instruction manual and accessories in a secure, dry place. In this way you will always have all the information and parts ready to hand.

Environment

When the time comes to dispose of this product please consider the environment and take it to a recognised recycling facility instead of disposing with general household waste.

Call your local council, civic amenity site, or recycling centre for information on the recycling and disposal of electrical products.

Why does my PHAC stop sometimes?

Excessive heat or a jammed blade or bit will cause the tool to shut down. Wait for it to cool down before re-starting.

The PHAC wont start, what's wrong?

a)Repeated cutting out may be caused by dust build up on temperature sensitive components. Clean as described in the maintenance section.

b)Check the PHAC is fitted firmly and correctly, power is correctly connected and live, check the fuse is valid, also make sure the switch and speed control on the tool are working and being operated correctly.

What kind of fuse does the plug use?

See the plug or use identical replacement.

Can I charge a POWERhandle at the same time as using the PHAC?

Yes, charge using the SCP on the side of the POWER8 case.

Where should I keep my PHAC?

In a dry place at a stable temperature between 10ºC and 24ºC (50ºF and 75ºF).

What should I do if my PHAC gets wet?

Safely remove from any electrical source. Dry fully for at least 14 days in a warm but not hot place and ensure there is no residual moisture before trying to use**.**

How can I get my PHAC repaired if it is damaged?

Contact your retailer, never open the case yourself.

Where do I find my serial number?

On the left hand side of the body, beside the Mains Input.

Where can I get replacement parts, advice or help?

Ask at your retailer or visit **www.cel-global.com**

How long is the warranty and what is covered?

Please see inside cover

Technical Specifications 9.0

Input voltage and frequency	- AC 230-240V 50Hz **or** 100-120V 60Hz **This must match local supply**
Output voltage	- DC 18V *(under load)*
PHAC weight and dimensions	- 3.7Kg 215x155x260mm
Product Code	- PHAC-230 **or** PHAC-110

f you experience any problems with the product please contact
email: service@cel-global.com
CEL UK: +44 8453 88 97 69
CEL US: +1 800-233-7592
www.cel-global.com


GENERAL HAZARD SAFETY ALERT


RISK OF SHOCK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KEEP BYSTANDERS AWAY

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