

# TECHNICAL SPECIFICATIONS

PRODUCT CODE • 144VC	• 144RA	• 144FL
MOTOR TYPE • Hongyang #550	• Hongyang #390	• Hongyang #390
RATED VOLTAGE • 14.4V	• 14.4V	• 14.4V
OPERATION TIME • HIGH 13mins LOW 20mins	• ~12 hours	• ~20 hours
FEATURE • Strong Suction VS runtime	• 85dB Output	• 1W LED 100 lumens
ACCESSORY FITTING • Ø 32mm OD	• 5V USB Port	• 30,000hr bulb life
WEIGHT WITH 144BP15 • 1.47kg (3b 4oz)	• 0.95kg (2b 2oz)	• 0.49kg (1b 1oz)

This product is sold in several configurations. The Rating Label is fixed inside the battery compartment, check the codes on the Rating Label on your product match those in this user manual. The Rating Label will show basic warnings and specifications. The images and descriptions in this user manual may differ from your product. For features or accessories not covered by this manual or if you are unsure about a feature or function contact your supplier or visit [www.cel-global.com](http://www.cel-global.com) where you can find updated user manuals and compatible parts.

No person should use this product without first reading and understanding all documentation and warning labels and those from accessories and attachments used. Keep these instructions safe and provide them to all users. For use only as outlined in this document, any other use will be considered as misuse.



© C Enterprise LTD 2013 Designed in UK Printed in China  
Manual Version: 140506  
[www.cel-global.com](http://www.cel-global.com) • [info@cel-global.com](mailto:info@cel-global.com)  
UK • HK • USA • China • Europe • Australia • Japan

# IMPORTANT SAFETY NOTES

**Intended use of 144VC**  
This product is intended for light cleaning duties for short periods of time on small dry debris and dust which is able to be captured inside the supplied dust bags. It must not be used to suck up liquids or damp materials or harmful dust particles as part of a safety system.

**Intended use of 144RA**  
This product is intended for receiving a strong radio signal within its set range and amplifying it for listening by the purchaser in a small area.

**Intended use of 144FL**  
This product is intended for providing a lit area for a short period within the scope of the beam. It is not to be used as a safety or signalling device.

**General Safety Rules for Power Tools**  
**Read all 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 tools plus compatible chargers and accessories.

**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. Always fully uncoil cables to avoid heat buildup.

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 and 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. Fully uncoil all cords in use.  
f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.  
**3) Personal safety**  
a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.  
b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, and/or hearing protection used for appropriate conditions will reduce personal injuries. Be aware of dangerous conditions that can occur while working on certain materials. Take appropriate measures to reduce risk. For example; Oak and Beech can give off harmful dust. Use dust extraction and respiratory protection along with other safety precautions.  
c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.  
d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.  
e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.  
g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.  
**4) Power tool use and care**  
a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.  
b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.  
c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.  
d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.  
e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power 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.  
**5) Battery tool use and care**  
a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.  
b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.  
d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.  
**6) Service**  
Have your power tool serviced by a qualified and approved repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

### Additional Safety Warnings for Household Products

- Check the work area for any protruding nails, screw heads or anything that could damage or obstruct the product or the user.
- Never use the product near flammable liquids or gases.
- Allow the product to stop completely before opening it or removing cuttings or debris or removing the battery.
- Keep hands away from moving parts.
- Never shine the light beam directly into the eyes of a person or animal, it could damage the eyes or cause a distraction. Never shine the beam at a moving vehicle use the light in a way that could cause or lead to injury.
- Do not allow the volume to reach levels that can damage hearing or people or animals. This can occur if the level is set too high or the listener is too close to the source of the sound.
- Be conscientious of others when using loud or bright devices. Keep volume levels at a reasonable level and avoid shining the light onto residential properties. Only use these devices when the sounds or light generated will not be disturbing to those around you.

If you experience any problems with the product please contact your supplier or find your regional office via the website: [www.cel-global.com](http://www.cel-global.com)

**Guarantee**  
Normal wear and tear, including accessory wear, is not covered under guarantee. Following successful registration, the product is guaranteed for domestic use against manufacturing faults for a period of 24 months. Proper care is required to maintain this product in working condition. This product is not guaranteed for hire purposes. If you have any questions, please contact us.

**Declaration of Conformity**  
We declare under our sole responsibility that the products described in "Technical Specifications" is in conformity with the following standards or standardisation documents:

144VC  
EN 55014-1:2006+A1:2009+A2:2001  
EN 55014-2:1997+A1:2001+A2:2008

144FL  
EN 60598-1:2008+A11:2009  
EN 60598-2-4:1997  
EN 62031:2008  
ZEK 01.4-08. ISSUE 29-11-2011  
EN 55015:2006+A1:2007+A2:2009  
EN 61547:2009

144RA  
2008/42/EC

*Chris Elsworth*  
Chris Elsworth  
Managing Director - 6th May, 2014

C Enterprise (UK) LTD  
Unit 4 Harbour Road Trading Estate  
Portsmouth, BS20 7BL, UK

Technical file can be provided by:  
CEL-HK 912 Nan Fung Commercial Centre,  
19 Lam Lok Street, Kowloon Bay, Hong Kong

# WARNING SYMBOLS

- GENERAL HAZARD
- READ INSTRUCTIONS
- PROTECT VISION, HEARING, RESPIRATION
- FLYING DEBRIS
- BE AWARE OF OTHERS
- KEEP DRY
- PROTECT FROM OVERHEATING
- WEAR APPROPRIATE CLOTHING
- SHARP BLADES

This user manual refers to the battery 144BP15 which is covered in another user manual. There are specific sections which are applicable only to the 144VC Vacuum Cleaner, the 144RA Portable Radio and the 144FL Flash Light.  
Users must read and understand all warnings and documentation relevant to attachments, accessories and materials used. If absent, replacement user manuals can be found via [www.cel-global.com](http://www.cel-global.com)

- 144VC Vacuum Cleaner**
  - ① Dust Bag Cover and Release Button
  - ② Air Suction Inlet Nozzle
  - ③ Air Outlet Vents
  - ④ Battery Fitting
- 144FL LED Flashlight**
  - ⑥ Lens and Cover
  - ⑦ Rotating Head
  - ⑧ Wrist Strap
  - ⑨ Battery Fitting
- 144RA Portable Radio**
  - ⑪ Carry Handle
  - ⑫ Display and controls
  - ⑬ Speaker
  - ⑮ USB 5V Output and Headphone Minijack
  - ⑯ 14.4V Battery Fitting

# User Manual Cordless Vacuum Portable Radio LED Flashlight



14.4V CEL

# PREPARATION

Read and understand all safety warnings and all instructions before operating this product.


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

**WARNING!** For AC products and devices; check that input voltages on the rating plates and the plug types match your local mains supply. If different, contact your supplier immediately and follow their advice. Do not modify the charger or plug in any way. For DC products; only use batteries and chargers specifically recommended by the manufacturer.


## Prepare for use

1. Charge your battery as described in the documents provided with the battery.
2. Secure your work so it is safe and accessible.
3. Fit an appropriate accessory to your tool as described in the following sections. Check it is properly seated and secured.
4. Fit a charged battery as described in the documents provided with the battery, check it is secure, ensure the moving parts are free to turn or move without doing any harm and run the product briefly to test both the battery and the alignment of the accessory. Adjust and retest as required.

## To start/stop the Radio or Flash Light

The switches on both the 144RA Portable Radio and the 144FL Flash Light are marked with a  symbol. Press once to turn on, press again to turn off.

## To start/stop the Vacuum Cleaner

Pressing button marked  will start the Vacuum in high suction mode, press it again to switch to low suction mode. The button marked OFF will stop the vacuum.

**WARNING!**

The battery is designed to switch off when the charge level is low, this is to protect the lithium ion cells from overdischarge which would cause a permanent failure. DO NOT restart the device after it has switched itself off, to do so may cause a failure due to overdischarge which will not be covered by any warranty.

# 144VC Cordless Vacuum

Handy for the workshop, home, office or for cleaning up after jobs



Ø 32mm Inside  
Ø 39mm Outside

Never use this Vacuum on liquids or in wet areas.

## Empty the dust bag

Remove all batteries and power supplies before doing any maintenance or cleaning of the product. Press the Dust Bag Cover Release Button and rotate the Dust Bag Cover open. Slide the Dust Bag Support up and out of the Vacuum. Take this assembly to a suitable waste disposal bin before separating the 2 parts. Release the Dust Bag from the Dust Bag Support and empty the contents of the dust bag into your waste disposal.

## To assemble the bag into the frame

Insert one of the white tabs on the Dust Bag into the slot on the Dust Bag Support, rotate the Dust Bag so the white and black frames are aligned.



## To fit the Dust Bag to the Vacuum

Keeping the Dust Bag and the Dust Bag Support aligned together, slide them into the Rails that will hold them in place inside the Vacuum, behind the Suction Tube. Check ensure the Dust Bag Cover can seal over the bag without catching it and then close the cover.

Never use the Vacuum without a Dust Bag properly fitted completely dry and in good condition. To do so would allow debris or moisture into the motor and may damage it.

## Fit tubes and accessories

The included floor tool, crevice tool and extension tube can be fitted inside the Suction Tube to give additional functionality and access to awkward places.



# 144RA Portable Radio



Portable AM/FM Radio with a USB charger and LED light

To activate or replace the backup battery which preserves memory and clock functions.


Remove the main battery from the bottom of the Radio. Open the cover on the rear of the Radio, note the locations inside for 4x AA batteries. If the AA batteries are present remove them. Inside this compartment there is a circular cover which can be gently rotated with a thin coin, there are 3 positions, the central position will allow the cover to be removed. Under this cover is a round CR2032 battery, remove the battery by pressing the metal clip 1-2mm away from the centre of the battery, the battery will spring out. Remove the plastic insulator tab which prevents the battery from touching the contact plates and insert the battery with the + symbol visible. Install the circular cover and rotate it to a closed position. Reinstall the AA batteries if required. Fit the rear cover by inserting the bottom tabs and then rotating it upward until it clicks into place.

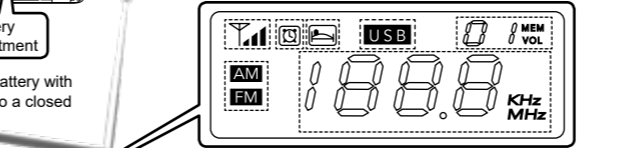


## To set the time


Turn the Radio off. Press the BAND button once to set the hour, again to set the minute and once more to save and exit the mode, the buttons  TUNE/SEEK  will increase or decrease the set time.





To set the alarm. NOTE! Only functional with main power source.

With the Radio turned off, press the PRESET button once to turn the alarm on or off as indicated by the  symbol and display the alarm time. While the alarm time is displayed press the BAND button and set the alarm time in the same way as the time was set.



## To tune to a radio broadcast

With a 144BP15 battery fitted, Turn the Radio on by pressing the  button. Unclip the Aerial and raise it to its maximum height, angle and move the Radio and Aerial as required to receive a strong signal from your local broadcast.




Set the volume level by pressing the  VOLUME  buttons, choose a low level until the desired signal is present. Press the BAND button to select AM or FM bands. Press the buttons  TUNE/SEEK  to increase or decrease the tuned frequency by the minimum increment or press and hold either direction for 2 seconds and the Radio will enter seek mode. Seek mode will scan for a strong signal and then stop.

## To set a preset memory there are 2 methods.

1. Tune to the desired frequency then press the PRESET button, the MEM symbol will flash on the screen. Use the M+ and M- buttons to select a Memory Preset Number. Press PRESET to save the current frequency to this Memory Preset Number. Up to 5 memory positions are available.

2. Press and hold the PRESET button for 2 seconds. This will scan for strong frequencies and save each one to a memory preset in the order they are detected.

## To use the Sleep function

Turn the Radio off. Press and hold the  power button until the  symbol is displayed, press the  button again to choose the time until the radio powers off.

## To use the LED light

Press the LED button to turn the light on, press again to turn off.

## To use the USB connection

With a 144BP15 battery or suitable AA batteries fitted. Connect a compatible device to the USB Port. Charging or operation will begin immediately. Follow the directions of the device.

NOTE! MP3 playback via USB is not currently supported.

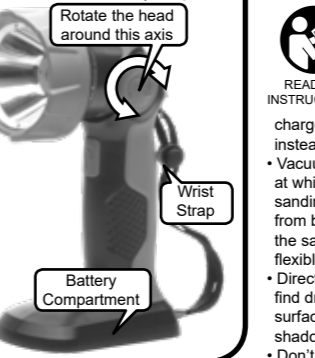
# 144FL Flash Light

A bright white focused beam with rotatable head and carry strap

## To adjust the direction of the lamp

Simply rotate the head to the required position. The screw fitting on the rim of the lens is part of the construction and is not designed to adjust the focus or as access to the bulb.

There are no user serviceable parts inside this product, the bulb should last 30,000 hours so any faults are likely to be in the battery or to require a replacement product.

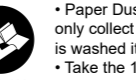


**WARNING!**

Sharp blades, heat buildup, harmful dust and flying debris are a danger to user and bystanders. Use of suitable protective clothing, gloves, footwear, lung, eye and ear protection as well as safe working practices can reduce these risks. Always switch a product off prior to any adjustment or when fitting or removing a battery.

If the battery is hot, damaged or emitting smoke or strong smells it should not be used. Allow the battery to cool before using or charging it. Contact your supplier or CEL to replace faulty items.

# OPERATION TIPS



READ ALL INSTRUCTIONS

- Paper Dust Bags will collect fine dust, Nylon bags will only collect larger particles but are washable. If a nylon bag is washed it must be completely dry before use.
- Take the 144RA Portable Radio camping and you can use the USB Port to charge mobile telephones or similar devices. Additional batteries will increase the amount of charge available or you can use 4x AA batteries to power the device instead.
- Vacuum extraction on sanding devices greatly improves the speed at which they remove material by removing dust and debris from the sanding sheet as soon as it is freed from the surface, this prevents it from blocking the cutting action of the sanding grit and building up on the sanding sheet. It also improves health issue related to sanding. Fit a flexible hose between a sanding device and the 144VC Vacuum Cleaner.
- Direct the beam of the 144FL Flash Light across a flat surface to quickly find dropped items or to show up marks and uneven areas on the surface. Pointing the beam of light across the surface will create long shadows and make all small things much easier to spot.
- Don't forget about the handy light on the side of the 144RA Radio.

## The following is true for all lithium batteries regardless of brand.

- All lithium ion cells gradually lose their maximum capacity from the moment they are manufactured. This occurs constantly even in storage, try to buy new stock where possible.
- If storing your batteries for a long period try to charge them to around 80% rather than completely full, never leave them for longer than a few hours with less than 20% charge.
- A lithium battery left with a very low charge for a long period will almost always fail permanently.
- Several short operations with a cordless tool will use the charge in the battery more efficiently than a single constant use. Don't constantly switch on and off or stop in the middle of an operation just take sensible breaks during the work to allow the battery to rest briefly.
- When doing big jobs that require constant charging of the batteries remember that you can swap Li-Ion batteries at any time during a charge/discharge cycle.

# CARE AND ENVIRONMENT

## General inspection

Regularly check that all the fixing screws are present and tight, they may vibrate loose over time.

Keep the device's air vents unclogged and clean at all times. Remove dust and dirt regularly, before it can build up. Cleaning is best done with compressed air or a rag.

**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 the device.

After each use, remove the battery and carefully clean the tool and battery with a brush or rag. Clear any debris from around the battery mount, moving parts and clips.

## Storage

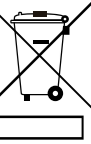
Store all tools, instruction manuals and accessories in a secure, dry place. In this way you will always have all the information and parts ready to hand. Lithium ion batteries should ideally be stored with 40 to 80% charge between 10°C and 20°C (50°F and 68°F).

**WARNING!** Always test and charge Li-ion batteries before storage and at least every 3 months to prevent permanent damage. Using the battery for a short period then charging it will allow the charger to balance the voltage between the 4 cells.

## 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.

Contact your local council, civic amenity site, or recycling centre for information on the recycling and disposal of electrical products and batteries. If you do not have access to suitable disposal facilities in your area please contact your place of purchase, they will advise you on the best way to dispose of your product.



## Maintenance

All electrical parts should be regularly serviced by an approved engineer.