

For marking iron, steel, and hard metals

# ELECTRIC MARKING PENCIL

Thank you for purchasing the EP-A3 Electric Marking Pencil.  
Please read this manual thoroughly before use to insure proper operation and long service.

## SPECIFICATIONS

Rated Voltage	100V
Rated Frequency	50-60Hz
Rated Current	4.2A
For Marking	Iron, Steel, Stainless Steel
Fuse	5A (φ 6.4mm × 30mm)
Control Box Dimensions	115 × 208 × 257mm (HxWxL, Outer size)
Power Cable Length	approx. 1.6m
Weight	approx. 6.5kg (including accessories)

## SYSTEM CONTENTS

Product is shipped with the following contents. Please check at time of unpacking.  
Please contact your distributor if any items are missing.

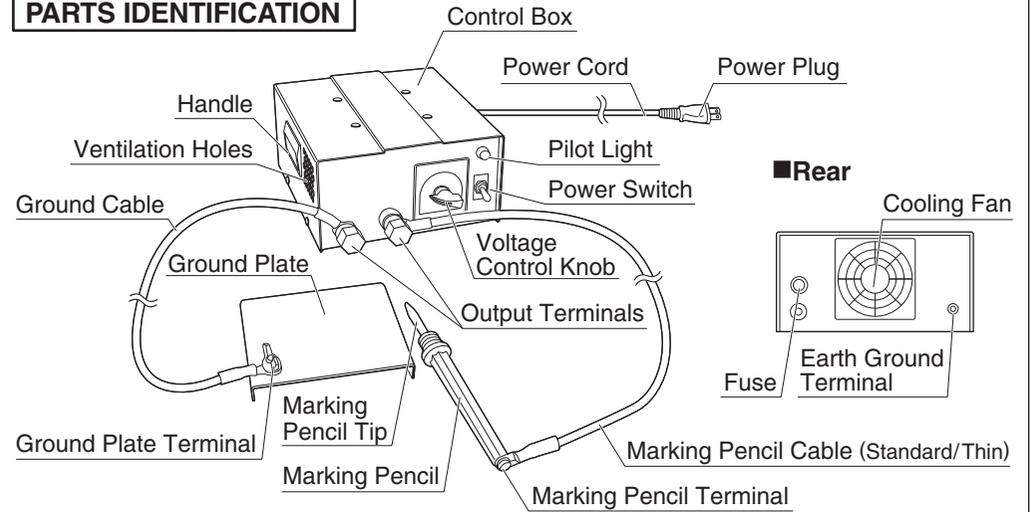
Name	Quantity	Name	Quantity
Electric Pencil Control Box	1	Ground Plate	1
Marking Pencil (with tip)	1	Ground Cable (approx. 1m)	1
Marking Pencil Cable, Standard (approx. 1m)	1	Instruction Manual (this document)	1
Marking Pencil Cable, Thin (approx. 1m)	1		

## CAUTION

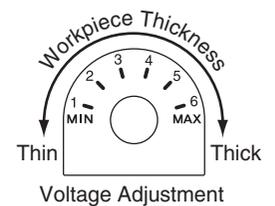
- For marking metals primarily composed of iron, (iron, steel, stainless steel.) Oxide coated steel can not be marked due to poor surface conductance.
- Non-ferrous metals (aluminum, copper, brass, carbide, etc.) and materials which are non-conductive (plastic, wood, etc.) can not be marked.
- For large items, if the ground and electrode distance is too great, the conductance may be poor and it can not be marked.
- Dirt, oil, grease, and rust will interfere with electrode conductance and prevent marking. Surface should be thoroughly cleaned before marking.
- Make sure all cable mounting screws (Output terminals, Ground Plate, and Marking Pencil,) are securely tightened.
- The Pencil Tip is hot. Wear heat-resistant gloves, and do not touch the Pencil Tip. With use, the Cables and Ground Plate will also become hot - This is normal operation.
- With long exposure, warm temperatures can cause burns - Use caution.
- Do not block the cooling fan or ventilation holes on Control Box.
- Pencil Tip will become dull with use. Sharpen with file as required.
- Keep away from children at all times.
- Do not use or store in hot or humid location.
- Do not crush or pull on Cables.
- Do not operate or plug in with wet hands. Make sure Power Plug is fully inserted.
- Turn off power and disconnect Power Plug when not in use.
- Do not modify product, or attempt unauthorized repair.
- Use only as directed.

## OPERATION ※ NOTICE: ⚠ Read and follow directions before use.

### PARTS IDENTIFICATION



1. Make sure that the power switch is turn OFF before plugging in the power cord.
  2. Connect the Ground Plate Terminal to the Ground Cable.
  3. Connect the Marking Pencil (with tip) to the Marking Pencil Cable.
  4. Connect the Ground Cable to one Output Terminal, and connect the Marking Pencil Cable to the other Output Terminal. (As there is no polarity, the cables can be connected to either terminal.)
  5. Place the workpiece on the Ground Plate and make sure the there is good contact to the plate. If workpiece does not have good contact to the Ground Plate, the workpiece may form burn marks at the contact point.
  6. Make sure the Pencil Tip is not touching the workpiece before turning on the Power Switch.
  7. Adjust the Voltage Control Knob. Use lower setting for thin workpiece, and higher setting for thick. (See diagram at right.) (Voltage also controls amount of marking on workpiece.)
  8. When Pencil Tip makes contact with the workpiece, it will begin to mark. Hold the Marking Pencil and write the desired characters as you would a normal pencil.
- ※ If there is excessive sparking at the marking tip, adjust the Power Control Knob to reduce power.



### Thin Marking Pencil Cable

- The Thin Pencil Cable can be used in place of the Standard Cable; because it is more flexible, fine marking is easier using the thin cable.

## WARNING

The Thin Cable will heat up more than the Standard Cable. Use only when marking is for short periods, or workpiece is thin and excessive heat is not created. Please select the proper Cable according to conditions.