Product Instructions

Model: M1
To prevent physical injury or product damage, please read this instruction manual and safety information before using the product. Keep this manual for future reference.

Micronx is not responsible for damage or loss caused by:
- Not following the instructions in this manual.
- Improper installation or usage.
- Repair by an uncertified person.
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1. Product Composition

* Make sure to check all the items are included.

Controller

Handpiece/Motor

Accessory

Portable Belt  On/Off pedal  Carbon brush  Stand for controller and handpiece
2. Examples of usage

2.1 For Portable

2.2 For Desk

Operate for extended periods when connected to the battery charger.
3. Operation

3.1 Part Functions

![Diagram of device showing various connectors and controls: Power Off / Speed down, Power On / Speed up, Forward, Reverse, Handpiece Connector, Battery Charger Connector, On/Off Pedal Connector, Battery Charger, On/Off Pedal.]
3.2 LED LAMP Detail

FRONT LAMP
- Lights up blue when power is switched on and Handpiece motor is running.
- Flashes blue for 3 seconds while Foot Pedal is being held down to turn on the Handpiece motor.

OVERLOAD LAMP
- Lights up red when the controller is in Overload Protection Mode.

BATTERY LAMP
- Three green lamps indicate battery charge level when power is switched on.

POWER LAMP
- Lights up green when power is switched on and Handpiece motor is running.
- Lights up red when the controller is in Overload Protection Mode.
- Lights up red when the controller is connected to the battery charger and battery level is less than 60%.

3.3 ON/OFF Pedal Operation
Connect the Foot Pedal to the FOOT PEDAL jack on the side of the Controller unit. To turn the handpiece motor ON from the Foot Pedal, press and hold the Foot Pedal down for more than three (3) seconds or until the blue light on the front of the Controller unit stops flashing. To turn the handpiece motor OFF, simply press and release the Foot Pedal.

3.4 Overload Prevention Function
As a safeguard against the application of excessive force against the handpiece motor, the unit will shut down and the Overload Lamp and Power Lamp will light up red. To reset the unit, simply turn the Power switch off and then on again. To avoid overload shutdown, try using a lower speed setting or less pressure on the bur.
4. Battery

4.1 Battery Recharge

When the Battery Charge Level Lamp on the Controller shows only one green light, or the unit shuts off due to a drained battery, plug the Controller into the Battery Charger. The lamp on the Battery Charger will light up red while the Controller is charging and it will turn green when charging is complete.

• It is okay to use the unit while it is charging.
• Use only the Battery Charger provided.
• Do not disassemble or modify the Battery Charger.

While the battery is charging:
• The room temperature should be between 0-40°C (32-104°F).
• The room should have good ventilation.
• There should be no flammable gasses or liquids (such as gasoline) in the room.
• Do not cover or place anything on the Controller or Battery Charger.

4.2 Battery Exchange

Lithium-Ion polymer batteries have a limited number of recharging cycles before they need to be replaced. The battery can only be replaced by an authorized service provider. Do not open the Controller case. No user serviceable parts inside. Contact the manufacturer or vendor for details.
5. Maintenance

5.1 Bur Replacement

To Install Bur:

1. **Open** collet by turning grip 1/4 turn as shown in Fig. B until you feel a “click”. The gap between the grip and handpiece retainer will narrow when the collet is open.
2. **Insert** bur fully into collet, then pull back out 1/16”.
3. **Close** collet by turning grip 1/4 turn as shown in Fig. A.

To Remove Bur:

1. **Open** collet by turning grip 1/4 turn as shown in Fig. B until you feel a “click”.
2. **Push** bur back into collet and **turn** to release.
3. **Pull** bur straight out of collet.
5.2 Carbon Brush Exchange

![Diagram of Carbon Brush Exchange]
6. Product Specifications

- Size
67mm(W) x 30mm(D) x 132mm(H)
- Weight: 185g
- Recharger Input Voltage
  AC 110~240V, 0.5A, 50/60Hz
- Output Voltage: 16.8V, 1.0A
- Charging Time: 2h 30m
- Using time (Unloaded Standard)
  At full speed: 5 hours
  At 10,000 rpm: 8.5~9 hours

- Size
  External Diameter ø 22mm
  Length: 110mm
- Weight: 71g
- Rotating Speed
  Max 25,000 rpm
  (DC 13V 1.2A)

Product specifications are subject to change without notice.
7. Instructions for Safe Usage

7.1 Environmental conditions for usage

- Temperature: 0-40°C (32-104°F)
- Relative humidity: 35-70%
- Altitude: 0-3000 meters (0-9843 feet) above sea level
- Do not shoot with a firearm.
- Do not use around flammable gas or liquid.
- Use in an area with good ventilation.

7.1 Cautions

- Always think “Safety First!”
- Keep out of the reach of children, the old and the infirm.
- Do not drop product or strike against hard surface.
- Do not operate with wet hands to avoid electric shock or related accident.
- Do not use if the power cord is damaged.
- Plug no more than two power cables into one electrical outlet.
- Do not use if the motor cord is damaged.
- Do not use if you detect any abnormalities such as noise, vibration or tempe-
  rature coming from the product.
- Do not cover the ventilation openings.
- Do not blow compressed air into the ventilation openings.
- Do not leave the product unattended while it is running.
- Stop using if product causes any rashes or allergic reactions and contact a
doctor.
- Do not disassemble or modify product.
- Do not let oil, water, or any other liquid penetrate any part of the product in-
  cluding the controller, motor, handpiece, foot pedal and battery charger.
- Do not use oil to clean the handpiece as it will cause bearing failure.
• Keep a bur inserted in the handpiece at all times.
• Use only ISO standard burs.
• Never use a damaged or bent bur.
• Do not exceed the recommended rotation speed for the bur.
• Do not open the chuck when the handpiece is rotating. Wait for the handpiece to come to a full stop before opening the chuck.
• Never connect the handpiece to the motor when the motor is running. Only connect the handpiece to the motor when the motor is fully stopped.
• Follow all laws regarding the disposal of batteries.
• Do not put the controller or battery in a fire to avoid an explosion. Do not heat the controller or battery to avoid an explosion.
• If battery acid comes into contact with skin or eyes, immediately flush with water and contact a doctor.
MicroNX

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WARRANTY

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- Product warranty against defects in material or workmanship lasts for 12 months from the date of purchase.
- Expendable parts are excluded from warranty.
- Product will be replaced or repaired in part or in whole, at manufacturer’s discretion.
- Contact customer service in the event of an alleged defect under warranty.
- Accidental misuse, inappropriate installation or failure to follow instructions voids the warranty.
- Warranty is only valid to the first purchaser of product.
- The cost of shipment for warranty repairs is the responsibility of the purchaser.
- Warranty is only valid with proof of purchase or receipt.
- Defacing, modifying or removing the serial number voids the warranty.
- Warranty does not cover damage caused by normal wear.
- Manufacturer is not responsible for damage, risks or liabilities arising from the use of this product.