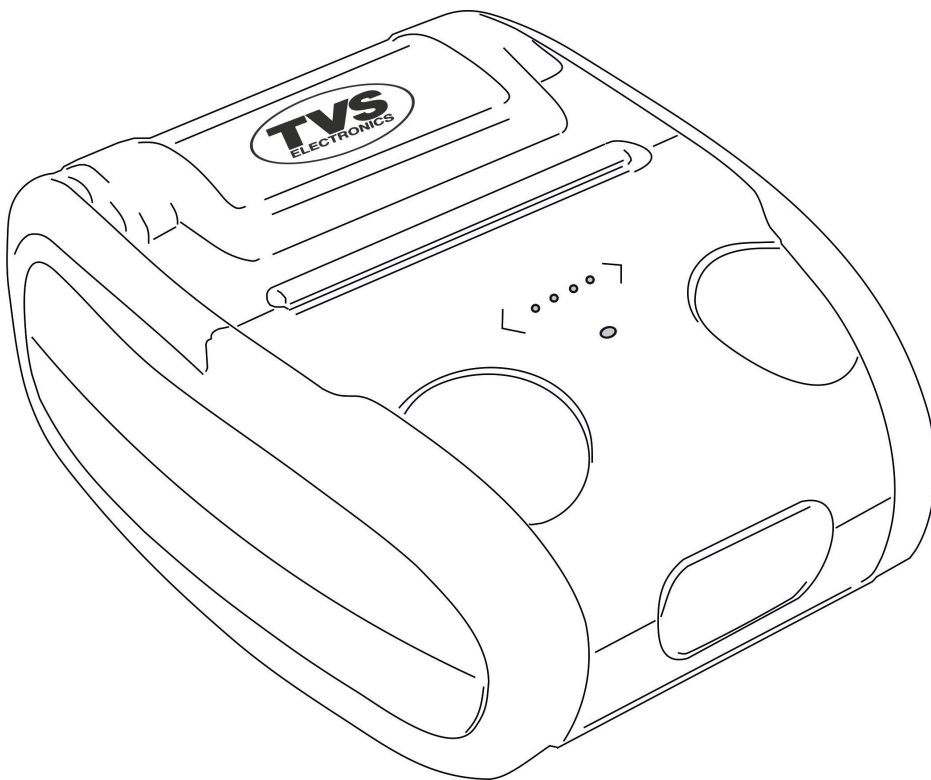




**Model No: MP280 Lite**



## **Mobile Printer User Manual**

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## ■ Safety Precautions

When using the MP280 Lite printer, please follow the recommended safety regulations provided below.



### **Warning**

**Violating the following instructions may cause serious injury.**

- ❖ Do not plug several products into one multi-outlet; this can provoke overheating and a fire.
- ❖ If the plug is wet or dirty, wipe it before usage.
- ❖ If the plug does not fit perfectly in the outlet, do not force it.
- ❖ Be sure to use only standard multi-plug outlets.
- ❖ You must use only the supplied adaptor. It is dangerous to use other adaptors.
- ❖ Do not pull the cable to unplug.
- ❖ This can damage the cable, resulting in a fire or a breakdown of the printer.
- ❖ Do not plug in or unplug with wet hands.
- ❖ Do not bend the cable by force or leave it under any heavy object.
- ❖ A damaged cable may cause a fire.



### **Caution**

**Violating the following instructions may cause injury to the user or damage the printer.**

- ❖ If you observe smoke, odour or noise from the printer, unplug it before taking the following measures:
  - Turn off the printer and unplug the unit from the electrical outlet.
  - Contact an authorized TVS-E service provider for repair.
- ❖ Use only approved accessories for your printer; do not disassemble or attempt to repair the printer yourself.
  - Contact your authorized service provider for all service replacements.
  - Do not touch the blade of the paper tear bar.
- ❖ Keep liquids and foreign objects away from the printer.
  - If any object or liquid falls into the printer, immediately unplug the printer and have it checked by an authorized TVS-E service provider.

## 1. Introduction

This guide explains on detail to install and use your MP280 Lite, including Safety Instructions and instructions on printing data and general maintenance of the mobile Printer.

### 1.1 Important Safety Instructions

#### Battery

MP280 Lite is fitted with battery specially designed for this Mobile Printer:

- ❖ Only use the appropriate chargers and batteries listed in catalogue
- ❖ Do not short circuit the battery.
- ❖ Do not attempt to remove the battery housing and its components cannot be modified.
- ❖ Do not disassemble the battery.
- ❖ Batteries at 'end of life' must be disposed off at appropriate sites.
- ❖ Avoid contact with leaking or a damaged battery.
- ❖ Adult supervision is recommended when product is used by young children.
- ❖ Avoid areas of excessive heat or moisture.

The lifespan depends on:

- ❖ Usage
- ❖ Number of charge, discharge cycles

**Warning:** There is a risk of explosion if the battery is incorrectly replaced.  
Never place the battery next to a heat source.

### 1.2 Standards

- ❖ **BIS Certified Product**



### ❖ WEEE (Waste Electrical and Electric Equipment)



This mark shown on the product or its literature indicates that the corresponding item should not be discarded at the end of its working life with other household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate marked items from other types of waste and recycle them responsibly to promote the Sustained reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office for details of where and how they can conduct environmentally safe recycling of such items. Commercial users should contact their suppliers and check the terms and conditions of purchase contracts. This product should not be combined with other commercial waste for disposal.

### ❖ Batteries

If your product contains batteries they must be disposed of at the appropriate collection points.



### Warning

#### 1.3 Lithium-Polymer Battery pack

The battery has the potential risk of overheating, fire and/or explosion. To avoid such risks,

Observe the following instructions:

- ❖ A visibly swollen battery may be dangerous.
  - ❖ Charger - Only use given along with product.
  - ❖ Keep away from open flames. (Do not place in a microwave.)
  - ❖ Do not leave the battery pack inside a vehicle in summertime.
  - ❖ Do not store the battery pack switched on in an enclosed place for a long time.
  - ❖ Do not allow the battery port to touch metal items, such as necklace, coin, key or clock etc.
  - ❖ Use the lithium secondary cell guaranteed by TVS-E.
  - ❖ Do not disassemble, compress or pierce the battery pack.
  - ❖ Do not drop the battery pack from a high place or subject it to strong shock.
  - ❖ Do not expose the battery to high temperatures over 60°C.
  - ❖ Do not expose to humidity.
  - ❖ Do not allow liquids to enter or leak into the battery compartment.
  - ❖ The battery has clearly delineated positive and negative poles. When inserting the battery into the charger and/or product, ensure that the battery is properly aligned.
  - ❖ Do not allow the battery's positive (+) and negative (-) poles to contact any metals. In addition, do not carry or store the battery with metal items.
  - ❖ Do not subject the battery to strong shock.
  - ❖ Do not pierce the battery with a sharp object, or hit it with a heavy object.
- Avoid accidental short circuiting of any battery. Allowing battery terminals to

contact conductive material will create a short circuit may cause burns and other injuries or could start a fire.

- ❖ Do not solder the battery.
- ❖ Do not disassemble and/or modify the battery.
- ❖ Do not use the battery if it is damaged or if the exterior is deformed in any way.

## Disposal Directions

- ❖ Do not dispose of waste battery packs recklessly.
- ❖ Do not burn or throw in fire to dispose of the battery pack, There is a risk of fire and/or explosion.
- ❖ How to dispose the battery packs may vary depending on countries or regions.

## Recommendation for Charging

- Do not charge your battery pack in a way not mentioned in the instruction manual. Doing so may result in fire or explosion.

## 2.0 Product Specification

|                              |  |
|------------------------------|--|
| Printing Method              | Thermal Line   |
| Support System               | Android(bluetooth) and Windows system(USB)                                       |
| Effective Printing Width     | 48 mm  |
| Paper Width                  | 58mm(2 inch)   |
| Dimension                    | 115mm*84mm*38mm  |
| Printed Line Width           | 24 Chinese/Line 48 English/Line Or 36 Chinese/Line 72                            |
| Encoded Code                 | GBK,BIG5,Unicode(UTF8)   |
| Build-in Font                | ASCII Font(12*24 8*16) GBK(24*24 16*16)  |
| Printing Speed               | 60MM/S   |
| Printer Life                 | 60KM(25% printing density or below)  |
| Printing Content             | English, numbers, various symbols, characters, pictures, 1D and 2D code printing |
| Resolution                   | 8 dot/mm,203 dpi   |
| Data Communication Interface | USB 2.0 and Bluetooth V4.0   |

|                   |   |
|-------------------|---|
| Charge Methods    | Standby Charge  |
| Anomaly Detection | Paper-End Alarm, Low Battery Alarm  |
| Paper Cut Method  | Manual Tearing  |
| Instruction Set   | ESC/POS Compatible Instruction Set  |
| Power Port        | DC 9V,2.2A  |
| Accessories       | Li-Polymer Battery, Power Adapter 9V,2.2A ,Development CD,Instruction,Printing Paper, charging cable. |

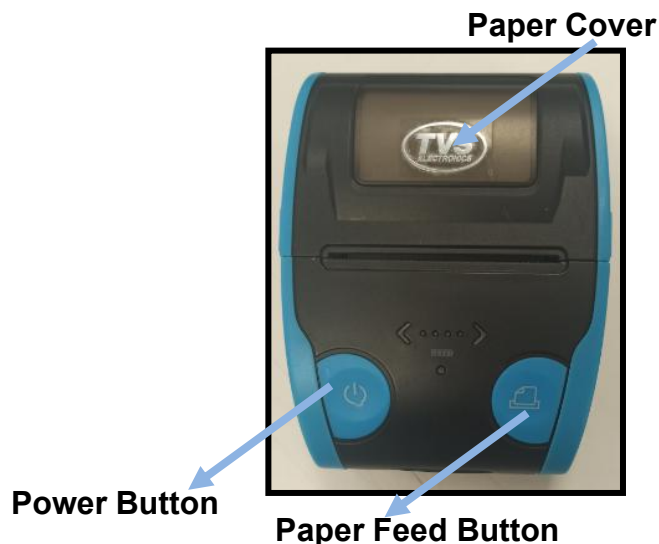
## HIGHLIGHTS

- ❖ Low cost and high quality.
- ❖ High reliability gives effective result with high performance.
- ❖ Wireless printing of text and image makes it special. (From Tabs, Mobile phones).
- ❖ Battery powered, hand held easy for mobility.
- ❖ Long battery life.

## 3.0 Installation & Usage

### Installing the Mobile Printer

#### • Front



#### ❖ Roll paper cover

The roll paper cover is opened for replacement of paper roll and recording paper roll is set.

#### ❖ Status indication LED

This Green LED is on when power is switched on. Further, when some errors happen, the

LED indicates its status.

### ❖ Power switch

This is the switch to turn on/off the Device.

### ❖ Feed switch

This is used to feed printing paper. The paper will be fed while you are pressing this switch.



### Caution

## 3.1 CONNECTIONS



1

2

## Interface Cable Connection

1. DC Power Jack
2. Mini USB connector



## DC Socket & USB Cover



### 3.2 Battery



#### **Warning**

- ❖ Mount the battery. Make sure that the (+,-) sides of the battery is in the same direction as the (+,-) on the printer.
- ❖ When DC jack are connected, then battery will charge through current coming from DC jack.

### **Paper Installation**

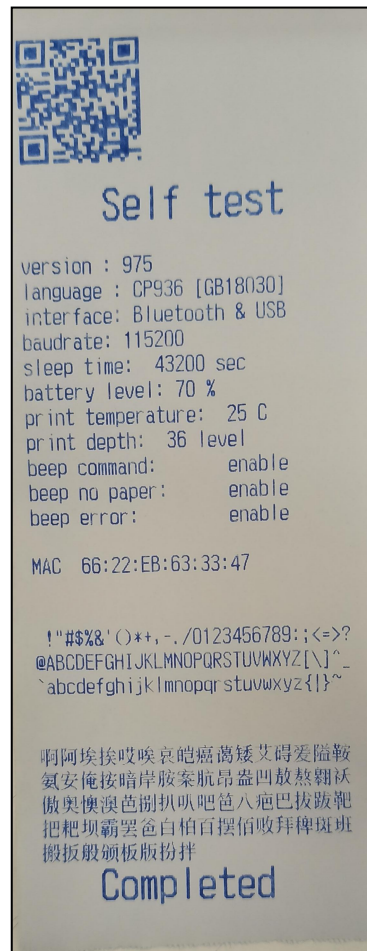
- ❖ Open the Top cover.
- ❖ Insert the paper.
- ❖ Pull out the paper and close the paper cover.

### 3.3 PRINTING DEMONSTRATION

The interface board processes the incoming data and prints according to the data sequence. The incoming data can be from any one of communication Interfaces (Bluetooth or USB) and data can be Text, ESC command and Image.

#### Test Print:

**Switch off the printer. Press and Hold “POWER” button and “FEED” button to get a “Test print”.**



## 4. Wireless Communication

### Bluetooth Connection

#### Bluetooth Pairing Steps:



#### ❖ Turn on Bluetooth option

The Printer can be connected to devices equipped with a Bluetooth interface such as Mobile Phones and Tablets.

Use the Bluetooth connection function supported by the device to connect to the printer.

### Battery and Display Information



#### Warning

Your Mobile Printer is supplied with a removable, rechargeable battery. This battery recharges when the Mobile Printer is connected to the charger unit.

#### Following installation,

When you charge the battery for the first time, it should be charged until full capacity is indicated. This may take from 1 to 2 hours.  
One of these Battery Status “LED” will be displayed depending on the charge in the battery.

### Fault Indications

- End of paper.
- Paper not loaded properly.

Below table shows LED indication on various fault case

| LED Reference | LED glow sequence  | indication                                    |
|---------------|--------------------|---|
| LED- LEFT     | Glows continuously | Power on                                      |
| LED- LEFT     | Toggles Slowly     | Platen Removal/<br>Paper not loaded properly. |

## 5. Troubleshooting

| Symptom              | Possible cause  | Corrective action   |
|----------------------|---|---|
| <b>No power</b>      | <ul style="list-style-type: none"> <li>Is the battery mounted?</li> <li>Is the battery run out of capacity?</li> <li>Is AC adapter connected?</li> <li>Is the power switch pressed?</li> </ul>        | <ul style="list-style-type: none"> <li>Mount the battery.</li> <li>Recharge the battery</li> <li>Connect AC adapter</li> <li>Press the power switch on.</li> </ul>  |
| <b>No printing</b>   | <ul style="list-style-type: none"> <li>Is the power on?</li> <li>Is the Thermal paper correctly fixed?</li> <li>Is the error LED blinks?</li> <li>Is the paper holder cover firmly closed?</li> </ul> | <ul style="list-style-type: none"> <li>Press the power switch on.</li> <li>Check the recording paper</li> <li>Recharge the battery.</li> <li>Release the error mode.</li> <li>Close the paper holder cover properly.</li> </ul> |
| <b>Dull Printing</b> | <ul style="list-style-type: none"> <li>Is the thermal head stained?</li> </ul>  | <ul style="list-style-type: none"> <li>Clean the thermal head</li> </ul>  |

## TVSE Take-Back & Recycling Program



### Overview

The new E-waste (Management) Rules, 2016 have been notified by the Ministry of Environment, Forest and Climate Change, Govt. of India vide notification dt.23.03.2016 and shall come into force with effect from 1st Oct, 2016. According to these Rules, the Producer shall be responsible for channelization of waste electrical and electronic equipment (popularly known as "WEEE"). This will ensure that the e-waste is disposed of in an environmentally friendly manner and will address the leakage to the informal sector.

Phase wise collection targets have been set for Producers to collect e-waste (either in number or weight) and shall be 30% of the quantity of waste generation during first two 2 years of implementation of the Rules, 40% during 3rd & 4th year, 50% during 5th & 6th year and 70% from 7th year onwards.

### TVS-E Commitment

TVS-E is committed to environmentally sound management of e-waste taking all steps required to ensure that e- waste are managed in a manner which shall protect health and environment against any adverse effects which may result from hazardous substance contained in such wastes. TVS-E assures that the covered products & Accessories, Consumables and spares do not contain lead, mercury, cadmium, hexavalent chromium, poly- brominated biphenyls or poly-brominated diphenyl ethers above a specified threshold. The threshold for cadmium is 0.01% by

weight in homogeneous material, for all other substances, the threshold is 0.1% by weight in homogeneous material.

## Introduction

E-waste is any electrical/electronic product or an accessory which is not useable and it is at its end of life for example old defective products like Printers, Keyboards, Mouse, User terminal etc.

E-waste has been defined as “waste electrical and electronic equipment, whole or in part or rejects from their manufacturing and repair process, which are intended to be discarded”. Whereas Electrical and electronic equipment has been defined as “equipment which is dependent on electrical currents or electro-magnetic fields to fully functional”. E-waste generally consists of those substances contained in an electronic product which can bring adverse effects to the atmosphere and hence managing it in a proper way is important. Apart from affecting the environment it can also affect the health of the people.

## Waste Collection

TVS-E has put in place a pan India collection mechanism to assist its customers in depositing their e-waste as per the new E-waste (Management) Rules, 2016 effective from 1st October, 2016.

You can deposit the WEEE at the nearest Collection Point. Details of the location of Collection Points and Collection Centres are also available on this website.

TVS-E assures all its customers that all its e-waste collected under these Rules will be recycled/ disposed of by an authorized e-waste Recycler as per the E-waste Management Rules, 2016.

## Do's and Dont's



### Do's:

- Always drop your used electronic products & Accessories/Consumables /spares/ batteries and packaging materials after the end of their life at the nearest collection point.

- Separate the packaging material according to responsible waste disposal options and sorting for recycling.
- Keep the product in isolated area, after it becomes non-functional/un-repairable so as to prevent its accidental breakage

#### **Dont's:**

- The product is not meant for re-sale of any unauthorized agencies/scrap dealers
- Never dump e-waste in garbage bins
- Do not dispose off your product in at municipal waste bins
- Do not throw used batteries into household waste.

#### **FAQs**

##### **1. What is e-waste?**

E-waste means electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment and repair processes.

##### **2. What is end-of-life of product?**

End-of-life of the product means the time when the product is intended to be discarded by the user.

##### **3. How can you dispose of your e-waste?**

You can deposit your e-waste at any of our Collection Points mentioned on our website.

##### **4. WHAT CAN I RECYCLE?**



Under E-Waste Management & Handling Rules 2016, we will accept and recycle all TVS-E products like Printers, Keyboards, Mouse, User terminal, Cartridges are accepted for recycling.

5. What is EPR (Extender Producer Responsibility)?

EPR means responsibility of any producer of electrical and electronic equipment, for channelization of e-waste to ensure environmentally sound management of such waste.

6. Do consumers have to pay for getting their electronics recycled?

Consumers do not have to pay any fee for recycling of TVS-E products

7. Is there any monetary benefit/discount linked to this take-back and recycling program?

As of now there is no monetary benefit/discount linked to this program. The main benefit of this program is cleaner, safer and green environment.

8. What will happen if the product is not properly handled and is given/sold to scrap dealer like any other ordinary scrap?

In case eWaste is sold to unauthorized dealers, they don't have scientific tools to recycle the products and therefore they are not authorized by the Pollution Control Board. In open area they burn the plastic parts, break the seal of parts which carries gases and try to extract metals. Such smoke and gases pollute the environment. Also hazardous residual are thrown in landfills which is dangerous for land, water, air and living beings.

9. How can you participate in the TVS-E Recycling Program?

You can dispose of a used TVS-E product very easily and responsibly. Simply call at 1800 425 4528 and drop it at your nearest Collection point's. All these E-waste will be consolidated and forwarded to Tumkur Collection point for final disposal through Authorized E-waste Recycler

10. What are the negative effects of improper recycling and dismantling of old electrical & electronic items?

- If the material is disposed off in open, then it may cause health risks and damage to environment

- Presence of heavy metals such as cadmium, lead etc and other toxic substances may pose risk to health and environment
- Burning of rubber & Plastic in open area causes air pollution.
- Batteries contain hazardous elements which may affect the health & environment, if not disposed off properly.

11. How to safely handle the product while disposing off?

- Old defective product should be kept separately from other products.
- Product should not be dropped in garbage bins containing municipal waste.
- It should be handed over to authorized recycler for safe recycling.
- Product should not be handed over to any recycler who does not have proper recycling facilities

12. What are health hazards and effects on environment if the product is dismantled by the consumer themselves?

All the electronic products are safe to use, but if the consumer dismantles or breaks them, they might be exposed to health hazards due to the chemical substances present in the products, which further can pollute the environment.

<https://www.tvs-e.in/>

|  |  |
|--|--|
| Sales / Product enquiry<br>044 6688 8822<br><a href="mailto:sales-support@tvs-e.in">sales-support@tvs-e.in</a> | Service enquiry<br>1860 425 2078<br><a href="mailto:support@tvs-e.in">support@tvs-e.in</a><br>WhatsApp: +91 9087871454 |
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