



Miniware TS-I

Replacement soldering tip for the TS100 and TS101
soldering irons
User manual



The tip heats up to 400 °C during operation. Read this manual and the manual of your soldering iron before use and keep them for future reference.

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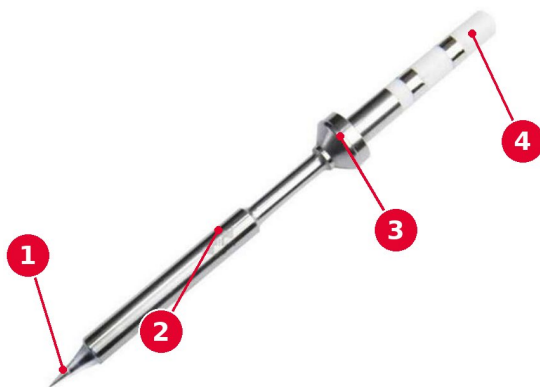
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1. Product description

1.1 Purpose

Miniware TS-I is a genuine replacement tip with a conical (needle) point for the **Miniware TS100** and **TS101** soldering irons. The tip and the heating element form a single unit – the heater is built directly into the tip, so by replacing the tip you also replace the heating part of the iron.

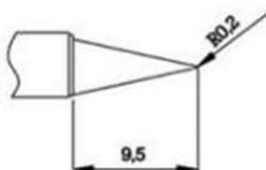
The fine point is suited to precision work: soldering small SMD components, thin wires and small solder pads, for example on flight controllers (FC), receivers or cameras of FPV drones. The tip is inserted into the iron connector first and can be swapped at any time for another tip type to suit the job.



① conical working point ② shank with built-in heating element ③ collar ④ tip connector (inserted into the iron)

1.2 Specifications and package contents

Parameter	Value
Product designation	TS-I (manufacturer Miniware)
Intended for	Miniware TS100 and TS101 soldering irons
Tip shape	I – conical (needle)
Overall length	approx. 103.8 mm
Weight	10.4 g
Length of the conical point	9.5 mm
Point radius	R 0.2 mm
Shank diameter	5.5 mm
Construction	tip and heating element as a single unit
Working temperature	set on the soldering iron, max. 400 °C
Package contents	1× TS-I soldering tip
Not included	soldering iron, power supply, stand, solder, flux



*Dimensions of the conical point
according to the manufacturer's
drawing (mm)*

2. Use

2.1 Safety instructions

- When the iron is switched on, the tip heats up to **400 °C**. Do not touch the metal part of the tip during operation or after switching off until it has cooled down completely – risk of burns.
- Insert and remove the tip **only with the iron disconnected from power** and after the tip has cooled down.
- Do not use the iron with the tip in a humid environment or in an environment with flammable or explosive substances. Do not work with wet hands and do not immerse the iron in water.
- Never leave a switched-on iron unattended and always put it down in a stand away from flammable materials. Disconnect the power when the iron is not in use.
- A light smoke may appear when a new tip is heated for the first time. This is normal and is caused by the first heating of the heating element.
- Soldering produces flux fumes. Work in a well-ventilated area and do not inhale the fumes.
- The point of the tip is sharp. Keep the product out of the reach of children.
- Also follow the safety instructions in the manual of your soldering iron.

2.2 Installing and replacing the tip

► TS100 soldering iron

- ① Disconnect the iron from power and let the tip cool down.
- ② Loosen the tip setscrew on the iron.
- ③ Pull out the old tip and insert the TS-I tip, connector first, all the way in.
- ④ Tighten the setscrew.
- ⑤ Connect the power. If the iron shows **“sen-err”**, the tip is not installed properly – install it again.

► TS101 soldering iron

- ① Switch the iron off and let the tip cool down.
 - ② Pull out the old tip and insert the TS-I tip.
 - ③ Switch the iron on. If the iron shows **“No tip!”**, the tip is not firmly inserted – insert it again.
- ※ If the tip is hard to insert into the iron, adjust the ball screw of the iron according to its manual.

The TS-I tip is intended exclusively for the TS100 and TS101 soldering irons. Do not insert it into other soldering irons.

2.3 First heat-up and temperature calibration

After a new tip has been installed, the iron may briefly display random temperature values – the iron is checking the tip status and this is normal.

The TS100 adjusts the temperature parameter of the tip automatically. If the temperature does not match after a tip change, calibrate the temperature according to the manual of your iron (TS101: menu item *TempCalib*). Always calibrate with the tip installed and cooled down to room temperature – for the TS100 the manufacturer recommends leaving the iron with the tip at rest for about 10 minutes before calibration.

2.4 Soldering with a needle tip

- Keep the working point tinned before the first soldering and then continuously – it transfers heat better and oxidises less.
- Do not press the tip against the joint or rub it over the joint; excessive pressure damages the tip.
- Use only rosin (resin) based flux. Fluxes with a high chlorine or acid content quickly destroy the tip.
- The fine point has a low thermal capacity. For large solder pads and thick power wires, use a tip with a wider working surface.

2.5 Tip care and service life

- Before switching the iron off and before a longer break, leave a layer of solder on the point – it protects it from oxidation.
- Do not leave the tip at a high temperature for a long time without solder, otherwise the working surface will burn out.
- Never clean the tip with rough materials or files.
- If the point is oxidised and solder does not stick to it, carefully rub it with 600–800 grit emery cloth, clean it with ethanol or isopropyl alcohol, heat it to 200 °C and tin it immediately.

The tip is a consumable part. Its service life depends on maintenance and intensity of use; wear of the working surface due to normal use is not a product defect.

2.6 Troubleshooting

Problem	Cause and solution
TS100 shows “sen-err”, TS101 shows “No tip!”	The tip is not installed properly – remove it and insert it again all the way in (on the TS100 tighten the setscrew). If the message persists, try another tip; on the TS101 a long press of button A in standby displays the internal resistance of the tip (<i>Tip R</i>).
Random temperatures are displayed after installing the tip	The iron is checking the tip status; this is normal.
Solder does not stick to the tip	Temperature above 400 °C, working surface not tinned, lack of flux, wiping on a dry sponge or a sponge with a high sulphur content, contact with plastic, silicone oil or other chemicals, poor-quality solder with a low tin content. Treat an oxidised point as described in chapter 2.5.
Light smoke at first heat-up	Normal during the first heating of the heating element.

3. Information for the EU and Czech market

The information in chapters 3 and 4 is based on the legislation of the European Union and the Czech Republic. If you use the product in another country, follow the regulations of the country in which you use it – the law of the country in which the product is operated is decisive.

3.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorاما.cz
Phone	+420 252 252 098
Website	www.rotorاما.com

3.2 Disposal



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste.**
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also <https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu>.

4. Warranty and statutory rights for defects

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 3.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.