



velleman VTSS220 Temperature Controlled Soldering Station User Manual

[Home](#) » [Velleman](#) » velleman VTSS220 Temperature Controlled Soldering Station User Manual 

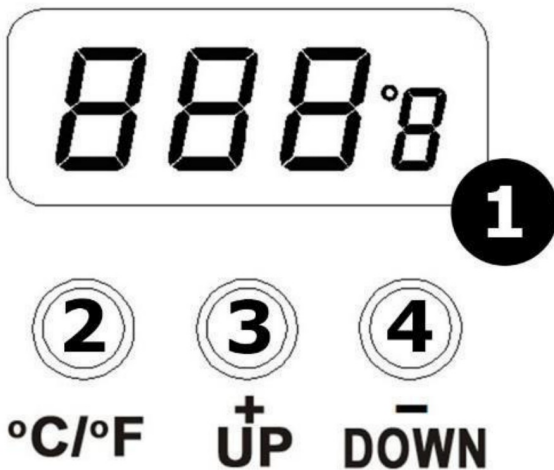
velleman VTSS220 Temperature Controlled Soldering Station



Contents

- 1 FEATURES
- 2 Introduction
- 3 Safety Instructions
- 4 General Guidelines
- 5 How to Solder
- 6 Overview
- 7 Operating Temperature
- 8 Operation
- 9 Cleaning and Maintenance
- 10 Technical Specifications
- 11 Warranty
- 12 Documents / Resources
- 13 Related Posts

FEATURES



Introduction



■ To all residents of the European Union

Important environmental information about this product

This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; it should be taken to a specialized company for recycling. This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules.

If in doubt, contact your local waste disposal authorities.

Thank you for choosing Velleman! Please read the manual thoroughly before bringing this device into service. If the device was damaged in transit, do not install or use it and contact your dealer.

Safety Instructions

This device can be used by children aged from 8 years and above, and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the device in a safe way and understand the hazards involved. Children shall not play with the device. Cleaning and user maintenance shall not be made by children without supervision.



Read and understand this manual and all safety signs before using this appliance.



Indoor use only. Keep this device away from rain, moisture, splashing and dripping liquids. Never put objects filled with liquids on top of or close to the device.

Always disconnect mains power when the device is not in use or when servicing or maintenance activities are performed. Handle the power cord by the plug only.



Caution! After switching off, leave the power cord plugged in for a few minutes. When you switch off the unit, the automatic cooling function blows cooling air through the heater pipe for a short period. This protects the heater from damage and extends its lifetime. Do not disconnect the mains plug during this cooling process.

Do not crimp the power cord and protect it against damage.

Warning! If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid any hazard.

Make sure that the available voltage does not exceed the voltage stated in the specifications of this manual.



Plug the power cord into a suitable, earthed mains outlet.

Risk of electroshock when opening the cover.

Touching live wires can cause life-threatening electroshocks. Do not disassemble or open the housing yourself.

Have the device repaired by qualified personnel.

Do not operate the device with wet hands.



Never use the device on live electronic circuits.

Make sure power to the work piece is cut and capacitors are discharged.



Do not use near inflammable products or in explosive atmospheres. Heat can cause fire to inflammable products even when they are not in sight. Only use in properly ventilated rooms.

Incorrect use may cause fire.



Do not touch the shafts, tips, or hot air gun as this can cause serious burns. Keep the tips and hot air away from the body, clothes, or other flammable material. Do not aim the hot air gun at the eyes. Use gloves and/or heat-resistant tools to pick up the PCB assembly to prevent burns. Always return the irons and gun to their stands between uses; always let the device cool down after use and before storage.

Place the device on a level, stable, and fire resistant working surface.



WARNING! – This tool must be placed on its stand when not in use; do not leave the tool unattended when switched on.



Do not inhale solder fumes. The vapours that are released during soldering are harmful. Therefore, you shall only use the soldering station in well ventilated areas or under an exhaust hood (solder fume extractor). Dispose of fume filters and solder residue in accordance with local regulations.

- Use the soldering iron on a heatproof workbench.
- Place the soldering iron in its holder after use.
- Let a hot soldering iron cool down naturally and do not immerse in water.

General Guidelines

Refer to the Velleman® Service and Quality Warranty on the last pages of this manual.

- Protect this device from shocks and abuse. Avoid brute force when operating the device.
- Keep this device away from rain, moisture, splashing and dripping liquids.
- Familiarise yourself with the functions of the device before actually using it.
- All modifications of the device are forbidden for safety reasons. Damage caused by user modifications to the device is not covered by the warranty.
- Only use the device for its intended purpose. Using the device in an unauthorised way will void the warranty.
- Damage caused by disregard of certain guidelines in this manual is not covered by the warranty and the dealer will not accept responsibility for any ensuing defects or problems.
- Nor Velleman nor its dealers can be held responsible for any damage (extraordinary, incidental or indirect) – of any nature (financial, physical...) arising from the possession, use or failure of this product.

How to Solder

- File off any dirt, rust or paint on the parts you wish to solder.
- Heat the parts with the soldering iron.
- Apply resin-based solder to the part and melt it with the soldering iron.
NOTE: Be sure to apply a solder paste to the part before applying non resin-based solder.
- Wait for the solder to cool and harden before moving the soldered part.
CAUTION: Handle a heated soldering iron with extreme care as the high temperatures may cause burns.
- The soldering iron may produce smoke at first use due to a dried out heating element. This is normal and should only last for approx. 10 minutes.
- Never file the soldering tip.
- Use a soldering iron stand in order to avoid burns.
- The temperature of the soldering iron will drop if it is used without the tip.
- Let the soldering iron cool after use.
- The mains cable of this device should not be replaced. Discard the device if the power cable has been damaged.
- Cleaning and user maintenance shall not be made by children without supervision.

Overview

Refer to the illustrations on page 2 of this manual.

1	display
2	temperature unit °C/°F
3	increase temperature
4	decrease temperature

Operating Temperature

The most common soldering alloys used in the electronics industry consist of 60 % tin and 40 % lead. The operating temperature of this type of solder is detailed below and can vary from manufacturer to manufacturer. However, to meet RoHS requirements, these solders are no longer allowed and are replaced by lead-free solders that require a working temperature which is $\pm 30\text{ }^{\circ}\text{C}$ ($54\text{ }^{\circ}\text{F}$) higher.

	lead solder	lead-free solder
melting point	215 °C (419 °F)	220 °C (428 °F)
normal operation	270-320 °C (518-608 °F)	300-360 °C (572-680 °F)
production line operation	320-380 °C (608-716 °F)	360-410 °C (680-770 °F)

A good joint is assured if the iron's operating temperature is set within the parameters suitable for the type of solder being used. The solder will flow too slowly if the temperature is too low; if the temperature is too high, the flux in the solder may burn which will give rise to billowing white smoke. In turn, this will result in a dry joint or in permanent damage to the PCB.

Operation

1. Connect the soldering iron to the station. Place the iron in its stand.
2. Connect the station to the mains and switch on the station.
3. Select the temperature units and set the desired temperature.
4. Wait for the iron to warm up and reach the desired temperature.
5. You can start soldering once the soldering iron up to temperature.

Notes

- Always replace the iron in its holder when not being used.
- The station will automatically switch off when the internal temperature reaches a critical point. Once the temperature has dropped to a safe level, the station will switch on again.
- Do not apply the soldering iron to the same place for a long time.
- Do not leave the device unattended when switched on.
- Switch off after use.

Cleaning and Maintenance

- Keep the ventilation openings clear, clean and dust-free at all times.
- If the device is running erratically or something unusual occurs during use, immediately switch off the device and unplug from the mains. Inspect the device before using it again. Repair must only be carried out by a qualified technician.
- If the supply cord is damaged, it must be replaced by a qualified technician.
- Wipe with a damp cloth to keep it looking new. Do not use harsh chemicals, cleaning solvents or strong detergents.
- Clean the device and accessories before storing.

Storing

- Store the device, its accessories and this user manual in the original packaging.
- Always store in a cool and dry place.

Technical Specifications

power supply	220-240 V~, 50 Hz
power consumption	60 W (max. 90 W)
temperature range	50-480 °C
dimensions	120 x 100 x 150 mm
weight	2 kg

Use this device with original accessories only. Velleman nv cannot be held responsible in the event of damage or injury resulting from (incorrect) use of this device. For more info concerning this product and the latest version of this manual, please visit our website www.velleman.eu.

The information in this manual is subject to change without prior notice.

© COPYRIGHT NOTICE

The copyright to this manual is owned by Velleman nv. All worldwide rights reserved. No part of this manual may be copied, reproduced, translated or reduced to any electronic medium or otherwise without the prior written consent of the copyright holder

Warranty

Velleman® Service and Quality Warranty

Since its foundation in 1972, Velleman® acquired extensive experience in the electronics world and currently distributes its products in over 85 countries.

All our products fulfil strict quality requirements and legal stipulations in the EU. In order to ensure the quality, our products regularly go through an extra quality check, both by an internal quality department and by specialized external organisations. If, all precautionary measures notwithstanding, problems should occur, please make appeal to our warranty (see guarantee conditions).

General Warranty Conditions Concerning Consumer Products (for EU):

- All consumer products are subject to a 24-month warranty on production flaws and defective material as from the original date of purchase.
- Velleman® can decide to replace an article with an equivalent article, or to refund the retail value totally or partially when the complaint is valid and a free repair or replacement of the article is impossible, or if the expenses are out of proportion.

You will be delivered a replacing article or a refund at the value of 100% of the purchase price in case of a flaw occurred in the first year after the date of purchase and delivery, or a replacing article at 50% of the purchase price or a refund at the value of 50% of the retail value in case of a flaw occurred in the second year after the date of purchase and delivery

- Not covered by warranty:
 - all direct or indirect damage caused after delivery to the article (e.g. by oxidation, shocks, falls, dust, dirt, humidity...), and by the article, as well as its contents (e.g. data loss), compensation for loss of profits;
 - consumable goods, parts or accessories that are subject to an aging process during normal use, such as batteries (rechargeable, non chargeable, built-in or replaceable), lamps, rubber parts, drive belts... (unlimited list);

- Made in PRC Imported by Velleman nv Legen Heirweg 33, 9890 Gavere, Belgium www.velleman.be**

Documents / Resources

