

USER MANUAL

MXLR Mobile Soldering Station

MAX-13-002

! IMPORTANT - READ BEFORE USE !

Before you start assembling or use any MXLR product via the product specific manual, you must read and understand the "GENERAL & SAFETY PRECAUTIONS".

WARNING: High temperature device! Risk of burns and fire! Read instructions before use!
Do NOT connect any other device/unit/tool/phone etc. beside the iron with the USB-C from this set!

Overview

The MXLR Mobile Soldering Station is a next-generation, ultra-high frequency portable soldering system designed for professional RC model applications.

Compared to conventional soldering irons, it delivers higher power, faster heating, and a significantly more compact and lightweight design.

This tool is ideal for maintenance work at the pit area, especially during on-site RC racing events, but can also be used for a wide range of general soldering tasks.

Key Features

- High power output (equivalent to a traditional 150W soldering iron).
- Rapid heat-up time: ready in approx. 10 seconds.
- Ultra-lightweight design: Handle ca. 30g. / Base unit ca. 200g.
- Dimensions: ca. 125(L) x 85(W) x 22 (H) mm.
- Detachable power and PD cables for improved portability and safety.
- Compatible with interchangeable T12 soldering tips for various applications.
- Powered by standard 2S LiPo batteries or 5–12V DC sources.
- Adjustable maximum temperature limit (factory setting: ~420°C).
- Digital display for input/output voltage.
- Dual-color LED status indicator.
- Premium lightweight construction using aluminum and carbon fiber.

!!! Safety Instructions !!!

- Always check polarity before connecting power.
- **No reverse polarity protection is included.**
- Never touch the soldering tip during or immediately after use.
- Allow the unit to cool down completely before handling or changing parts.
- Use only within the specified voltage range (5–12V DC).
- This device is intended for experienced users.
- Keep away from children.
- Use on heat-resistant surface.
- Never leave unattended.
- **Do NOT connect any other device/unit/tool/phone etc. beside the iron with the USB-C from this set. The 24V output voltage will damage or completely destroy all other devices beside the iron!**

Getting Started

1. Insert the soldering tip fully into the handle.
2. Connect the power cable to a suitable power source.
Important: Double-check polarity:
 - Plug: Red = Positive (+), Black = Negative (-)
 - Wire: Black = Positive (+), White stripe = Negative (-)
 - XT60: Flat side = Positive (+), Round side = Negative (-)
3. Turn on the device using the power switch.
4. Check the input/output voltage on the display.
5. Connect the PD cable to the handle.
6. Wait until the soldering tip reaches operating temperature (see LED status).
7. Begin soldering.
8. After use:
 - Turn off the device.
 - Disconnect the PD cable.
 - Disconnect the power supply.
9. Allow the soldering tip to cool completely before touching.

LED Status Indicator

No light:

Power not connected correctly or device malfunction.

Solid green:

Tip not installed correctly or defective.

Green + solid orange:

Heating in progress.

Green + flashing orange:

Ready for use.

Solid orange (no flashing) and tip glowing red:

Temperature set too high or control system malfunction.

Replacing the Soldering Tip

1. Ensure the tip has completely cooled down.
2. Pull out the tip straight and insert a new compatible T12 tip fully.
Do not twist the tip during installation.
3. Check the LED indicator to confirm proper connection.

Adjustment & Calibration

All parameters are factory preset. There is basically **no need** to change these settings. Adjust only if necessary and within safe limits.

Temperature Adjustment:

- Use a small Phillips screwdriver.
- Turn the small screw on the handle (beside the LED) clockwise to increase temperature.
- Turn it counterclockwise to decrease temperature.

Output Voltage Adjustment:

- Use a small flat-head screwdriver on the base unit.
- Turn clockwise to increase voltage.
- Turn counterclockwise to decrease voltage.

Voltage Calibration:

1. Press the left button to activate the display.
2. Press the right button to switch between input/output voltage.
3. Press and hold the right button (2 seconds) until the display flashes.
4. Adjust values:
 - Right button = increase
 - Left button = decrease
5. Press and hold the right button again (2 seconds) to save settings.