

MODEL-X

User Manuel

Please read the instructions
carefully before use.



Made in HK

Safety Declaration

1.1 General Safety

- ▲ Use only power adapters certified for your country/region.
- ▲ Do not operate in humid environments.
- ▲ Do not operate in flammable or explosive environments.
- ▲ Keep the product surface clean and dry.

1.2 Warnings

- ▲ When using the Model-X, unplug the power after use or before leaving to prevent fire hazards.
- ▲ When powered on, the soldering tip temperature can reach 100°C–420°C—handle with care to avoid burns.
- ▲ Never immerse the Model-X in water or use it with wet hands to prevent electric shock.

1.3 Precautions

- ▲ The soldering control unit contains precision components—avoid dropping it.
- ▲ If the XY-245 is used continuously above 420°C for over 20 minutes, the handle temperature may reach 37°C. This is normal due to the metal construction.

Model-X Introduction

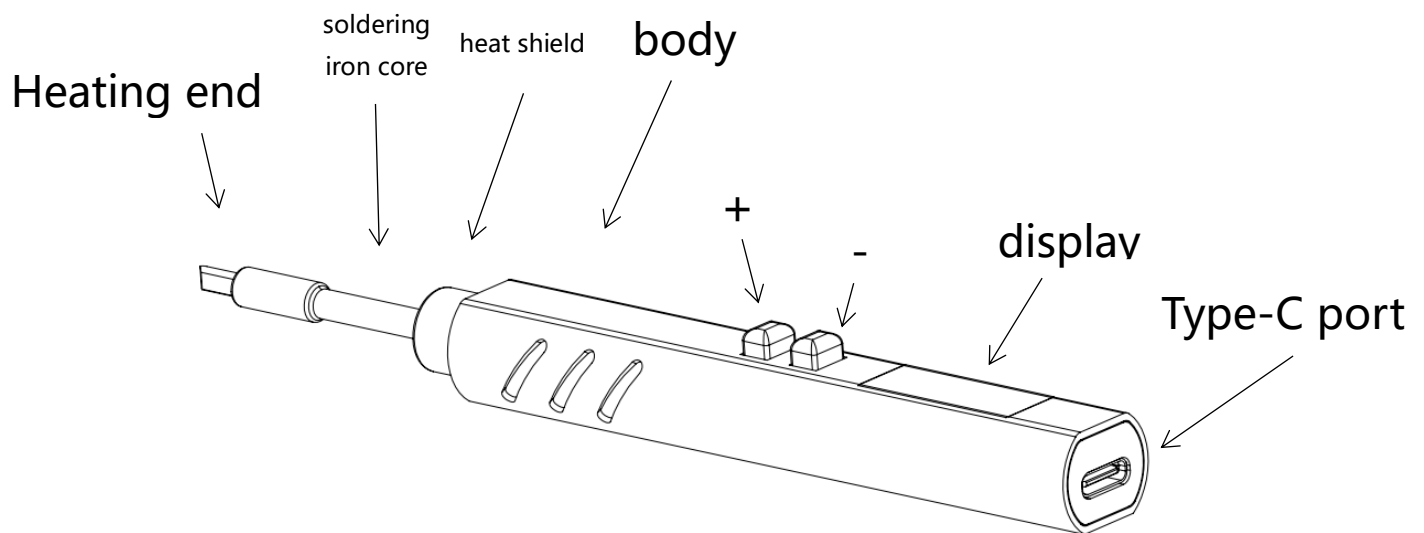
The Model-X is a portable smart soldering pen featuring:

- Type-C interface, compatible with QC/PD chargers, power banks, DC power supplies, and drone batteries (5V–24V input).
- Max power:
 - ✓ 65W (with custom 245 tip)
 - ✓ 120W (with original tip)
- Temperature range: 50°C–420°C (heats to 360°C in just 7 seconds).
- Smart heating: Automatically detects solder joint size and adjusts temperature for optimal performance.

Key Features:

1. 0.87-inch OLED screen.
2. Two physical buttons ("+" and "-").
3. Built-in accelerometer for:
 - Auto-heating when picked up / sleep when idle.
 - Auto-heating when picked up / sleep when idle.
4. Supports QC2.0/3.0, PD2.0/3.0 protocols. Custom 6Ω JBC 245 tip ensures full 65W PD compatibility.支持 QC2.0 QC3.0 PD2.0 PD3.0

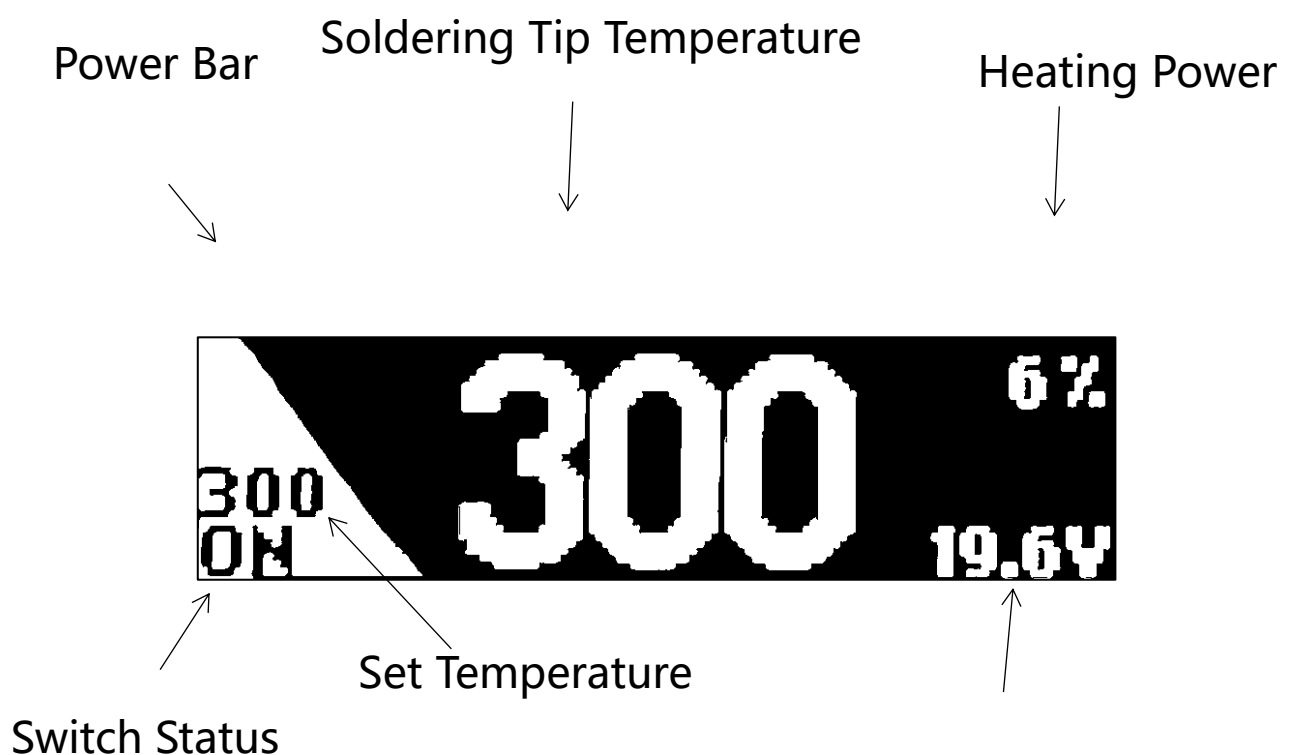
Model-X Structure Guide



1. Tip Installation

Insert the tip parallel to the body until a "click" is heard. **If successful, the screen displays the current temperature. If "ERR" appears, reinsert the tip!**

2.1. Soldering Interface



Supply Voltage

- 1、 Adjust temperature: Short-press "+" or "-" to set target temp (shown on screen).
- 2、 Toggle heating: Long-press "+" .
- 3、 Exit interface: Long-press "-" to enter the menu.
- 4、 Temp lock (anti-touch): Long-press both buttons to lock/unlock.

2.2 Sleep Mode

- a) User can set standby temperature. After inactivity, the pen enters standby (maintains set standby temp; if set to 0°C, heating stops).
- b) If unused further, it enters sleep mode when the preset time is reached (heating stops; screen shows "meteor effect").
- c) Wake-up: Pick up or press any button (if "pick-up detection" is enabled).



Cool Meteor Effect (Can
Be Turned Off)

Current Iron Tip Temp

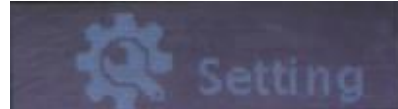
2.3 Main Menu

The main menu allows you to switch between interfaces. At present, two interfaces are accessible.

1.Iron Interface



2.Setting Interface

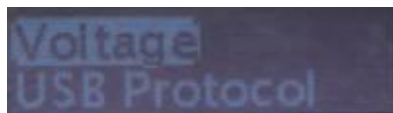


Main Menu Instructions:

- 1、 **Switch Target Interface:** Briefly press the "+" or "-" key to toggle between available interfaces.
- 2、 **Enter Selected Interface:** Long-press the "+" key to confirm and proceed.

2.4 Settings Menu

The settings menu is primarily used to select items for configuration.



Settings Menu Instructions:

- 1、 **Toggle Options:** Briefly press the "+" or "-" key to switch between settings.
- 2、 **Enter Settings:** Long-press the "+" key to select and enter an option.
- 3、 **Adjust Values:** After entering, briefly press "+" or "-" to modify values.
- 4、 **Return to Previous Level:** Long-press the "-" key to exit/return.

Settings Menu

5V/9V/12V/15V/20V

1.Requested voltage:

(QC mode max: 12V)

2. Charger type:

QC or PD (use PD for DC power).

3.Temp step:

Increment/decrement per button press.

4.Auto-heat on startup:

- Enabled: Immediate thermal startup at power-on.
- Disabled: Requires manual "+" key long-press.

5.Button swap:

Reverse "+" and "-" functions.

6.Sleep effect:

Toggle meteor animation.

7.Low-voltage protection:

When powered by battery, configure the low-voltage protection setting to avoid excessive battery depletion.

8.Max temp limit:

Set the maximum temperature of the iron.

9.Temp Slots:

When temperature slots are enabled, short presses in the iron interface will cycle through the three configured temperature slots, disabling temperature stepping functionality.

10.Standby settings:

When enabled, the system automatically enters standby mode after detecting no movement for a user-defined period (0 = immediate activation upon rest). Users may configure both the standby temperature (setting 0°C cools the iron to room temperature) and activation delay time.

11.Sleep timer:

Configure the soldering iron to automatically enter

sleep mode after a set idle period in standby (in seconds). Setting this value to 0 makes the iron sleep only when reaching near room temperature. Note: If a standby temperature is set, the sleep timer cannot be 0 (sleep mode will be disabled).

12.Pick-up detection:

Auto-resume heating when lifted.

13.Screen Orientation.

- Auto-rotation (adapts to your grip)
- Fixed orientation

(stays in selected position)

14.Motion sensitivity:

Adjust smart-heating responsiveness..

15.UI animation:

Choose fade/slide effects.

16.Temp calibration:

The system supports calibration for both room temperature and soldering tip temperature.

17.Factory reset.

18.About

Record firmware version information.

2.5 Calibration Interface

Purpose:

The calibration interface is designed for adjusting both room temperature (RT) and soldering tip temperature.

Warning:

 The iron will actively heat during calibration!

⚠ Tip calibration should only be performed by qualified personnel.

Calibration Operate Instructions:

Switch Calibration Options: Briefly press the "+" or "-" key.

Enter Calibration Mode: Long-press the "+" key.

Return to Option Selection (while in calibration):
Long-press "+" or "-" .

Exit to Previous Menu: Long-press the "-" key.

2.6 OTA Update

You can download the latest firmware for your soldering iron from the official website. Below are the OTA steps:

1. Remove the soldering tip.
2. Hold the "+" button (note: key reversal settings are ignored here) and connect the device to your computer via USB. No drivers are required—the soldering iron will be recognized as a USB drive.
3. Drag the firmware file (with the ****xxx245**** extension) into the virtual USB drive. The OTA process will begin, and the progress will be displayed on the screen.
4. Once completed, the device will automatically return to the soldering interface.

If OTA fails:

Ensure AIDA64 is not running.

Alternatively, try updating via mobile OTA.

For assistance, contact customer support through your purchase channel or leave feedback on the official website!

2.7 Specifications

Power interface	USB Type-C
Overall Dimensions	112mm(L) 16mm(W)
Weight	27.3g

2.8 Power Parameters

Input voltage	5-24V	
Protocols	PD QC	
Temp range	0-420°C	
Rated power	65W(100W MAX)	
Recommended voltage	QC:12V 1.5A 18W	PD:20V 3.25A 65W

2.9 Warranty

Coverage:

- 6 months for manufacturing defects.

Void if:

- No proof of purchase.

- Non-custom tips cause damage.
- Non-compliant accessories used.
- User misuse, disassembly, or unauthorized repair.
- Natural disasters/external damage.
- Iron Tips (consumables) excluded.
- Beyond warranty period.