

## MINIWARE Motion Control Electric Screwdriver ES15

MINIWARE Motion Control Electric Screwdriver is a new type of intelligent electric screwdriver independently developed by e-Design, which can automatically recognize User's operating motions and rotate accordingly. Its launching provides Users with a new operating experience of electric screwdriver. As an upgrade version, Motion Control Electric Screwdriver ES15 is a modular designed smart electric screwdriver with a built-in angular velocity sensor and MCU chips, compatible with multi-types of bits.

ES15 can be divided into two modules--main control and power module, and its whole body adopts fine high-quality 304 stainless steel shell with engraved novelty anti-skid patterns on the front shell. Compared with the previous versions of MINIWARE Motion Control Electric Screwdriver, ES15 has a larger capacity battery and OLED screen, which can offer longer working hours and display more working parameters; in addition, ES15 also provides a number of smart functions and operation upgrades:

- **Smart Motion Control Recognition and Directional Modes:** ES15 can be set to different working modes of Smart Motion Control and Directional Modes (forward rotation & reverse rotation); Motion Control is suitable for quick maintenance, and Directional Modes is used for heavy disassembly and assembly tasks;
- **Impact Function:** The impact function can ensure all screws are set in place with the precise torque;
- **Battery Management:** Intelligent Battery Management System manages battery power reasonably and prolongs battery life;
- **Adjustable Sensitivity:** The sensitivity and speed of motion control can be adjusted according to usage habits to achieve a better operating experience;
- **Anti-stuck Function (Retreat):** Specially designed for hexagon screws to prevent the screwdriver bit from getting stuck in slot, allowing you to operate freely;
- **Compatible with several bit specifications:** compatible with 4mm hexagon bits and 800 bits, suitable for more usage scenarios;
- **Upgraded Power Module:** Coreless motor cooperates with planetary gear and two-way overrunning clutch to provide sufficient power;



- **Front LED Lights:** The front shadowless LED lights illuminates the working spot, making it easier for work.

#### Other Functions:

- ◆ **Use It Automatically or Manually:** User can operate ES15 either with power on or tighten/loosen screws manually;
- ◆ **New SET Button:** For quick menu setting and combination unlocking;
- ◆ **Firmware Upgrade Function:** Run with e-Design self-developed DFU software, upgrade as you wish, and optimize the experience.

#### Product Parameters:

<b>Product Name</b>	<b>MINIWARE Motion Control Electric Screwdriver</b>
<b>Model</b>	ES15
<b>Body Material</b>	304 stainless steel
<b>Screen</b>	128*32dpi OLED
<b>Bit Specification</b>	Compatible with 4mm hexagon and 800 bits
<b>Manual Torque</b>	20kgf.cm
<b>Electronic Torque</b>	1.6kgf.cm
<b>Idling Speed</b>	470rpm
<b>Battery Capacity</b>	800mAh
<b>Working Voltage</b>	3-5V
<b>Working Time</b>	6 hours (no load)
<b>Charging Input</b>	USB-C 5V
<b>Charging Time</b>	50 minutes
<b>Size (without bit)</b>	19mm in diameter, 146mm in length
<b>Weight</b>	120g
<b>Other functions</b>	Directional mode (self-setting forward or reverse), impact function, anti-stuck function (Retreat), battery management, front lights, firmware upgrade