

VESSEL 220USBS1U

VESSEL BALL GRIP Rechargeable High-Speed Cordless Screwdriver

MODEL No. 220USB-S1U

Instruction Manual

1. INTRODUCTION

Thank you for purchasing the VESSEL BALL GRIP Rechargeable High-Speed Cordless Screwdriver, Model No. 220USB-S1U. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new tool. Please read this manual thoroughly before use and retain it for future reference.

2. IMPORTANT SAFETY INFORMATION

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury.

- Wear appropriate personal protective equipment, such as safety glasses, when operating the screwdriver.
- Keep the work area clean and well-lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- Avoid unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the tool.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Use the correct tool for your application. Do not force the tool.
- Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.
- Recharge only with the charger specified by the manufacturer.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1 x VESSEL BALL GRIP Rechargeable High-Speed Cordless Screwdriver (Model No. 220USB-S1U)
- 1 x 1/4 inch Hex Power Bit (PH2 x 3-1/2" / 90mm)
- 1 x Micro USB Charging Cable



Image: VESSEL BALL GRIP Screwdriver with included PH2 bit and USB charging cable.

4. PRODUCT FEATURES AND COMPONENTS

Familiarize yourself with the various parts of your VESSEL screwdriver:



Image: Detailed diagram illustrating the key features of the VESSEL 220USB-S1U screwdriver.

- **Charging Port (Micro USB Type B):** Used to recharge the internal battery.
- **Charging Indicator:** Illuminates during charging and indicates charge status.
- **Slide Switch:** Controls the direction of rotation (Forward/Reverse) and locks the tool.
- **LED Light:** Provides illumination for the work area, improving visibility in dark spaces.
- **Sleeve Chuck:** Securely holds 1/4 inch hex power bits.
- **Ball Grip Handle:** Ergonomically designed for comfortable and secure grip during use.

5. SETUP

5.1. Initial Charging

Before first use, fully charge the screwdriver's internal battery.

1. Locate the protective cap covering the Micro USB charging port on the screwdriver.
2. Open the protective cap.
3. Connect the Micro USB charging cable to the port and plug the other end into a compatible USB power source (e.g., computer USB port, USB wall adapter).
4. The charging indicator light will illuminate. Allow the screwdriver to charge until the indicator shows a full charge (refer to the product diagram for indicator location).
5. Once fully charged, disconnect the cable and close the protective cap to prevent dust and debris from entering the port.



Image: Visual guide for charging and replacing bits.

5.2. Bit Installation

The screwdriver uses standard 1/4 inch hex power bits.

1. Ensure the screwdriver is turned off (slide switch in the middle/locked position).
2. Pull the red sleeve chuck forward.

3. Insert the desired 1/4 inch hex bit into the chuck.
4. Release the sleeve chuck to secure the bit in place. Ensure the bit is firmly seated before operation.



Image: Illustration of inserting a 1/4 inch hex bit into the screwdriver.

6. OPERATING INSTRUCTIONS

6.1. Power-Driven Operation

The VESSEL 220USB-S1U offers high-speed power assistance for efficient fastening and loosening of screws.

1. Select the desired direction of rotation using the slide switch:
 - Slide forward (towards the bit) for tightening screws.
 - Slide backward (towards the handle) for loosening screws.
2. Position the screwdriver bit onto the screw head.
3. Press the power button to activate the motor. The LED light will illuminate the work area.
4. Apply gentle pressure and allow the motor to drive the screw. Release the button when the screw is tightened or loosened to the desired extent.

Your browser does not support the video tag.

Video: Official product video demonstrating the features and usage of the VESSEL Ball Grip Rechargeable Cordless Screwdriver.

6.2. Manual-Driven Operation

For applications requiring higher torque or precise control, the screwdriver can be used manually.

- Even when the power is off or the battery is depleted, the screwdriver can be used as a traditional manual screwdriver.
- Simply grip the handle and rotate to tighten or loosen screws. The robust internal mechanism allows for manual torque up to 88.5 lbf-in (10 N.m).

7. MAINTENANCE

- Keep the tool clean and free from dust and debris. Wipe the exterior with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- Store the screwdriver in a dry place, away from direct sunlight and extreme temperatures.
- Regularly inspect the bit and chuck for wear or damage. Replace worn bits to ensure optimal performance and prevent damage to screw heads.
- Ensure the charging port's protective cap is closed when not charging to prevent ingress of foreign materials.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Screwdriver does not turn on.	Battery is depleted.	Charge the battery using the provided USB cable.

Problem	Possible Cause	Solution
Screwdriver lacks power or stops during use.	Low battery charge.	Recharge the battery.
Bit is loose or falls out.	Bit not properly inserted into the sleeve chuck.	Ensure the sleeve chuck is pulled forward, the bit is fully inserted, and the chuck is released to secure it.
Screw head is stripping.	Incorrect bit size or worn bit. Excessive pressure.	Use the correct bit size for the screw. Replace worn bits. Apply appropriate pressure. Consider using manual mode for delicate tasks.

9. SPECIFICATIONS

- **Model Number:** 220USBS1U
- **Battery:** 3.6V (800mAh) Lithium-Ion (integrated)
- **Charging:** Micro USB port
- **No Load RPM:** 1,200 min⁻¹
- **Power Driven Torque:** Up to 3.5 lbf-in (0.4 N.m)
- **Manual Driven Withstanding Torque:** Up to 88.5 lbf-in (10 N.m)
- **Bit Compatibility:** 1/4 inch Hex Power Bits or Double Ended Bits
- **Features:** Built-in Bright LED Light, Forward/Reverse Slide Switch
- **Product Dimensions:** 10 x 2 x 2.7 inches
- **Weight:** 5.8 ounces
- **Material:** Tool Steel
- **Manufacturer:** VESSEL
- **Origin:** Made in Japan

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact VESSEL customer service or visit the official VESSEL website. Keep your proof of purchase for any warranty claims.

You can find more information and products from VESSEL at their official store:[VESSEL Tools Amazon Store](#)

For product details and support, you may also visit the official product page:[VESSEL 220USB Product Page](#)

