



# **Quick Installation Guide**

Xtreme LV Battery and Sol-Ark 15K-2P-N Inverter







**Product Specifications** 



**User Manual** 



**CEC List Checking** 



**UL 9540** 

# I. Pre-Installation Preparation

# **Safety Warnings**

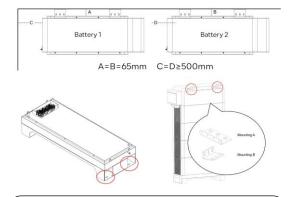
- Installation must be performed by qualified personnel. Read all relevant manuals before starting.
- Ensure power is OFF before installation. Disconnect batteries, PV modules, and AC power.
- Avoid battery short circuits. Verify polarity when connecting batteries.
- Comply with local electrical codes for safe and legal installation.

# **Required Tools & Equipment**

- Xtreme LV System
- Sol-Ark 15K-2P-N Inverter
- Power Cable: AWG 2/0 size, 2\*Positive, 2\*Negative
- Screwdrivers, Wrenches, Multimeter, and other electrical tools

# II. Installation Steps

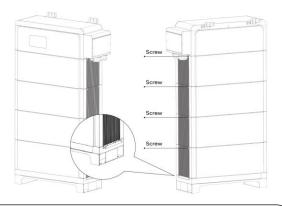
# STEP 1: Installing the Xtreme LV Battery



# Prepare the Installation

Ensure the following conditions before installation:

- Choose a suitable location: Ensure good ventilation and avoid direct sunlight or hightemperature environments.
- Secure the battery base: Fix the base to prevent movement.
- Pre-install Mounting A and Mounting B on the back of the main control unit.



# 2. Stack and Secure the Battery Modules

★ Follow these steps for proper stacking and stability:

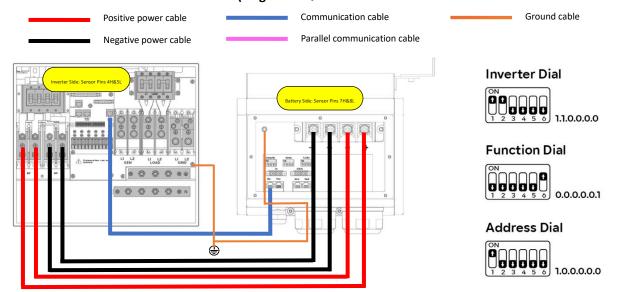
- Stack the battery modules one by one on the secured base.
- Lock the side panels on both sides to secure the structure.
- Wall mounting: Align with Mounting B on the back of the main control unit, mark the wall, drill holes, and secure the mounting brackets.
- Check and tighten all screws to ensure a stable and secure installation.







# STEP 2: Connect with the Sol-Ark Inverter (Single Stack)



#### 1. Power Cable Connection

- Ensure the Sol-Ark inverter and battery breaker are OFF before making any connections.
- Positive (+) terminal & Negative (-) terminal:

Terminal type: 2/0 AWG

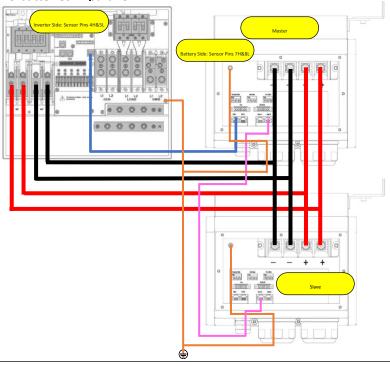
Torsion: 10N.m

. Ensure all terminals are securely tightened and properly insulated to prevent short circuits.

# 2. Communication Cable Connection & DIP Switch Setting

- Use RJ45 communication cables to connect the battery's INV1 port to the Sol-Ark inverter's Battery CANBus (BMS) port.
- Verify communication status on the Sol-Ark LCD screen after powering on the system.

#### Two batteries in parallel



#### **Inverter Dial**



1.1.0.0.0.0 \*Master Only

# **Function Dial**

Two Xtreme LV:





Master 1.0.0.0.0.1

1.0.0.0.0.1

#### Address Dial

Two Xtreme LV:





Master 1.0.0.0.0.0

Slave 0.1.0.0.0.0

#### **Power Cable Connection**

• Ensure the Sol-Ark inverter and battery breaker are OFF before making any connections.

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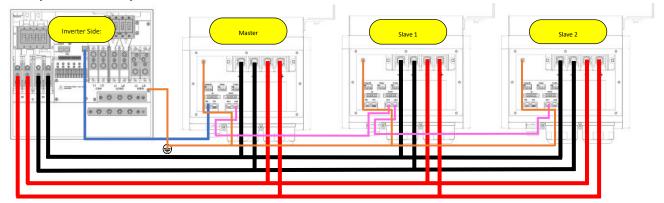
Please note that the parallel needs to connect the Link-B of the master to the Link-A of the slave.







#### Multiple batteries in parallel



#### **Inverter Dial**



#### **Function Dial**

Three Xtreme LV:



# Address Dial

Three Xtreme LV:







#### 1. Example Precautions

- This example is three batteries in parallel.
- Maximum number of batteries parallel: 15
- Address: The address dial switch is sequentially increased.
- Inverter: Please set the inverter dial switch according to the actual usage.
- **Function:** Set the first battery and the last battery of the system's function dial code as code 33 and set function dial code of the rest of batteries as code 32.

#### 2. Parallel Cable Connection

 Please note that the parallel needs to connect Link B of master to Link A of slave 1, and then connect Link B of slave 1 to Link A of slave 2, and so on.

# STEP 3: System Power-Up & Configuration

#### 1. Configure Inverter Battery Settings

Close the DC breaker on the Sol-Ark inverter, then press the power button on the Xtreme LV main control module to activate the system.

- Set Battery Capacity:
  - Formula: Battery Capacity (Ah) =
    Number of Battery Modules × 100Ah
  - Example for a 30kWh Xtreme LV system (6 modules): 600Ah
- Enable Battery Communication:
  - Check **U** "Use Batt % charged"
  - Check W "BMS Lithium Batt"
  - Set BMS Lithium Batt to "00" (this ensures proper CANBus communication with the Xtreme LV battery)
  - Check <a href="#"> "Activate Battery"</a>

## • Verify Communication:

- Ensure the  $\mbox{\bf RJ45}$   $\mbox{\bf CANBus}$   $\mbox{\bf communication}$  cable is securely connected between the battery and inverter.
- Confirm the battery dial switch is set to position 1.1.0.0.0.0 (Sol-Ark mode).
- Check the LCD screen on Sol-Ark to verify that the battery SOC (State of Charge) is displayed correctly.















# 2. Battery Network Connection & Remote Monitoring

For remote monitoring and system management, follow these steps:

- Install and Register on Renon Smart App
  - Download the Renon Smart app from Google Play Store or Apple App Store.
  - Open the app, select your country, and create an account.
- Bind the Battery to the App
  - Please scan Renon Smart Connection Guide QR code for details.
- Configure Battery Wi-Fi Connection







**IOS APP** 



Android APP

#### III. Conclusion

Following this quick guide ensures proper installation of the Xtreme LV battery and Sol-Ark 15K-2P-N inverter for efficient and stable system operation. For further technical support, contact the official support team.

**Renon Power Support:** +1 (833) 736-6687



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