Quick Installation Guide

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

Installation video | Product Specifications | User Manual | CEC List Checking | UL 9540

I. Pre-Installation Preparation

Safety Warnings

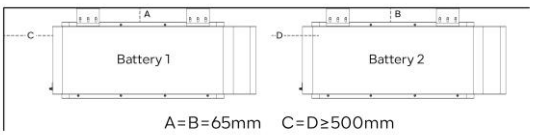
- **Installation must be performed by qualified personnel**. Read all relevant manuals before starting.
- **Ensure power is OFF** before installation. Disconnect batteries, PV modules, and AC power.
- **Avoid battery short circuits**. Verify polarity when connecting batteries.
- **Comply with local electrical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

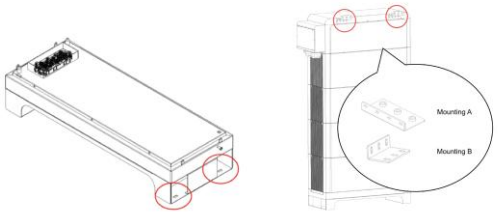
Required Tools & Equipment

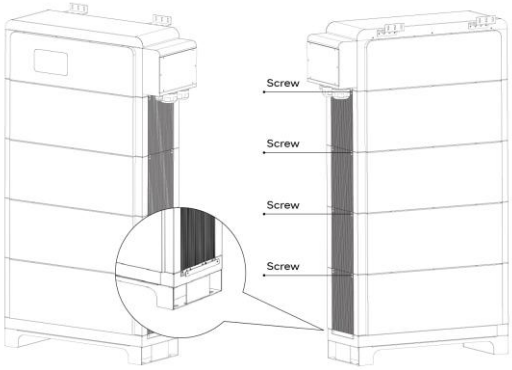
- Xtreme LV System
- Sol-Ark 15K-2P-N Inverter
- Power Cable: AWG 2/0 size, 2*Positive, 2*Negative
- Screwdrivers, Wrenches, Multimeter, and other electrical tools

II. Installation Steps

STEP 1: Installing the Xtreme LV Battery







1. Prepare the Installation

Ensure the following conditions before installation:

- **Choose a suitable location:** Ensure good ventilation and avoid direct sunlight or high-temperature 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.

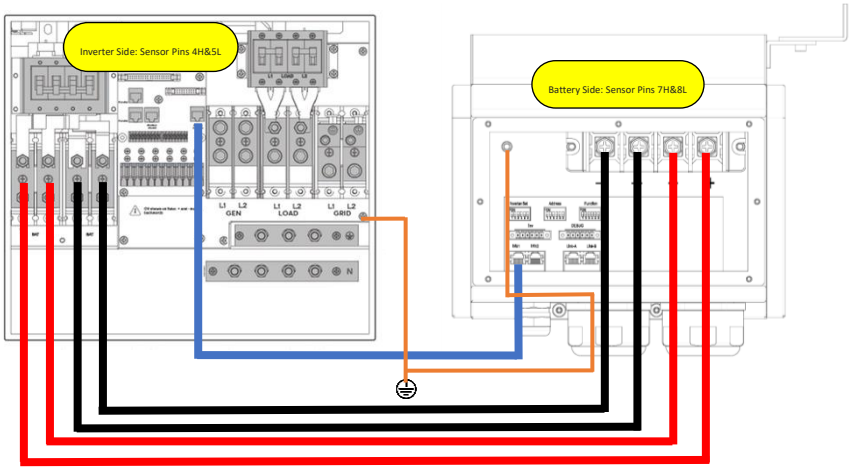
2. Stack and Secure the Battery Modules

Follow these steps for proper stacking and stability:

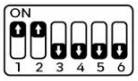
- **Stack the battery modules one by one** on the secured base.
- **Lock the side panels on both sides** to secure the structure.
- **Wall mounting**: Align with Mounting B on the back of the main control unit, mark the wall, drill holes, and secure the mounting brackets.
- **Check and tighten all screws**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

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

Positive power cable
Negative power cable
Communication cable
Parallel communication cable
Ground cable

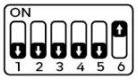


Inverter Dial



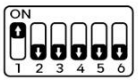
1.1.0.0.0.0

Function Dial



0.0.0.0.0.1

Address Dial



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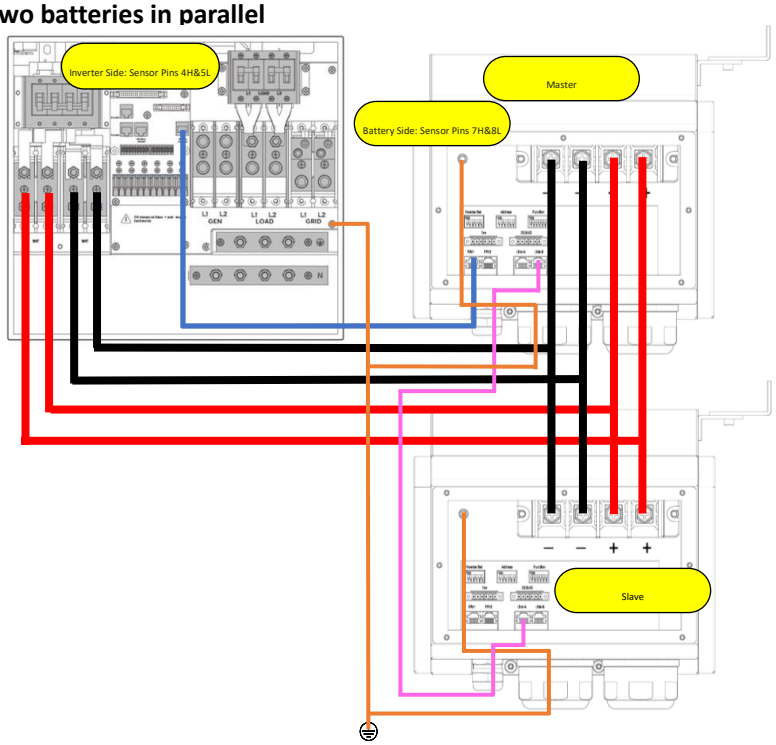
1. Power Cable Connection

- **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.**

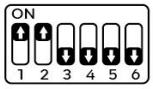
2. Communication Cable Connection & DIP Switch Setting

- **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



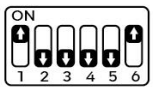
Inverter Dial



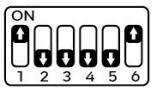
1.1.0.0.0.0
*Master Only

Function Dial

Two Xtreme LV:



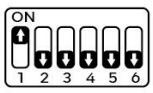
Master
1.0.0.0.0.1



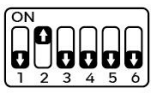
Slave
1.0.0.0.0.1

Address Dial

Two Xtreme LV:



Master
1.0.0.0.0.0

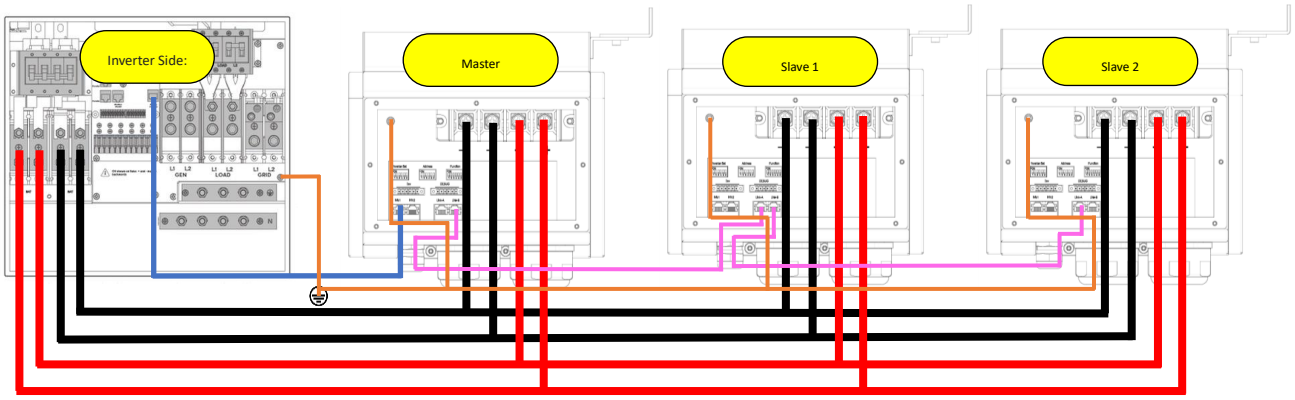


Slave
0.1.0.0.0.0

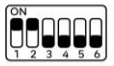
Power Cable Connection

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



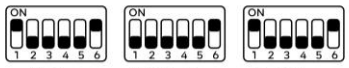
Inverter Dial



1.1.0.0.0.0
*Master Only

Function Dial

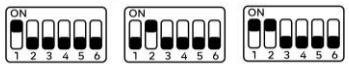
Three Xtreme LV:



Master 1.0.0.0.0.1 | Middle Slave 0.0.0.0.0.1 | Last Slave 1.0.0.0.0.1

Address Dial

Three Xtreme LV:



Master 1.0.0.0.0.0 | Middle Slave 0.1.0.0.0.0 | Last Slave 1.1.0.0.0.0

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

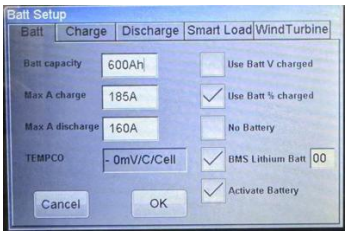
- **Please note that the parallel needs to connect Link B of master to Link A of slave 1, and then connect Link B of slave 1 to Link A of slave 2, and so on.**

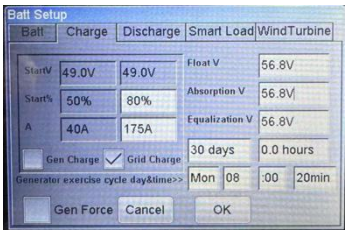
STEP 3: System Power-Up & Configuration

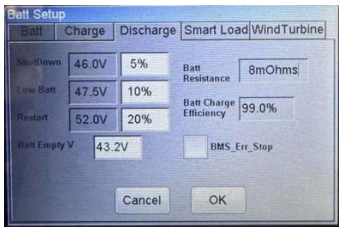
1. Configure Inverter Battery Settings

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 ✅ "Use Batt % charged"**
  - **Check ✅ "BMS Lithium Batt"**
  - Set BMS Lithium Batt to "00" (this ensures proper CANBus communication with the Xtreme LV battery)
  - **Check ✅ "Activate Battery"**
- **Verify Communication:**
  - Ensure the **RJ45 CANBus 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**

Renon Smart Connection Guide

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

Email: Support@renon-usa.com