

User Manual

Energy Storage System

MODEL : IJ1001SNBT



Sony Energy Devices Corporation
2012.4
Rev.5

Energy Storage System “IJ1001SNBT”

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE) . But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person’s body (excluding extremities: hands, wrists, feet and ankles) .

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void user’s authority to operate the equipment.

Table of Contents

Important Safety Information

- Read the first
Safety instructions

The Energy Storage Sysytem

- How the system works
The system structure

The Energy Storage System Installation

- Parts Included
Other Parts and Tools Required
Install procedure
On site software update (if necessary)
Commissioning

The Energy Storage System Activation

- Connecting to the Internet.
Activating Energy Storage System for Field Trial.

Important Information

Read the first

SAVE THESE INSTRUCTIONS– This manual contains important instructions for Model(s) IJ1001SNBT that shall be followed during installation and maintenance of the system.

To reduce the risk of electrical shock, and to ensure the safe installation and operation of the Energy storage system, the following safety symbols appear throughout this document to indicate dangerous condition and important safety instructions.



WARNING! This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.



NOTE : This indicated information particularly important for optimal system operation. Follow instructions closely.

Safety Instructions

- Perform all electrical installations in accordance with all local electrical codes and the National Electrical Code (NEC) , ANSI/NFPA 70.
- Be aware that only qualified personnel should install and/or replace the Energy storage system.
- Do not attempt to repair the Energy storage system; it contains user-serviceable parts. If it fails, please contact Sony Customer service to obtain a product number and start the replacement process. Tampering with or opening the Energy storage system will void the warranty.
- Before installing or using the Energy storage system, please read all instructions and cautionary markings in the technical description and on the Energy storage system.
- Do NOT disconnect the Power cables from the Energy storage system without off the connection box.

Energy Storage System “IJ1001SNBT”

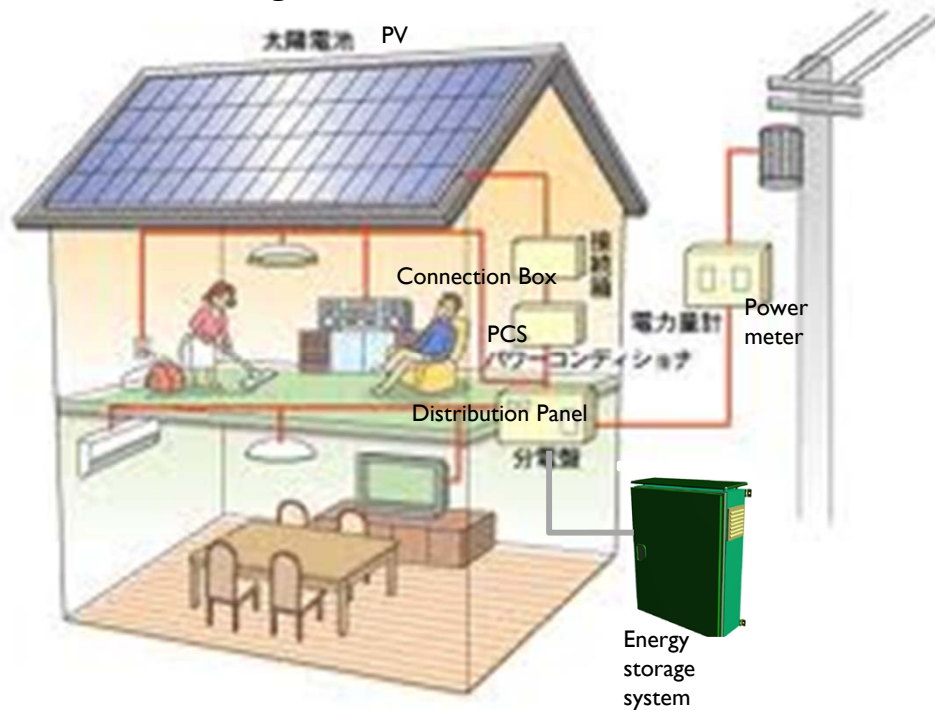
The Energy storage system

The Energy storage system is the world’s most technologically advanced energy storage system for utility-interactive applications. This manual details the safe installation and operation of the energy storage system.

The three key elements of the Energy storage system are :

- the energy storage system including Sony original lithium ion battery
- the wireless communication system (WiFi)
- the web-based monitoring and analysis system

This integrated system maximizes energy efficiency, increases system reliability, and simplified design, installation and management.



Energy Storage System “IJ1001SNBT”

The Energy Storage System

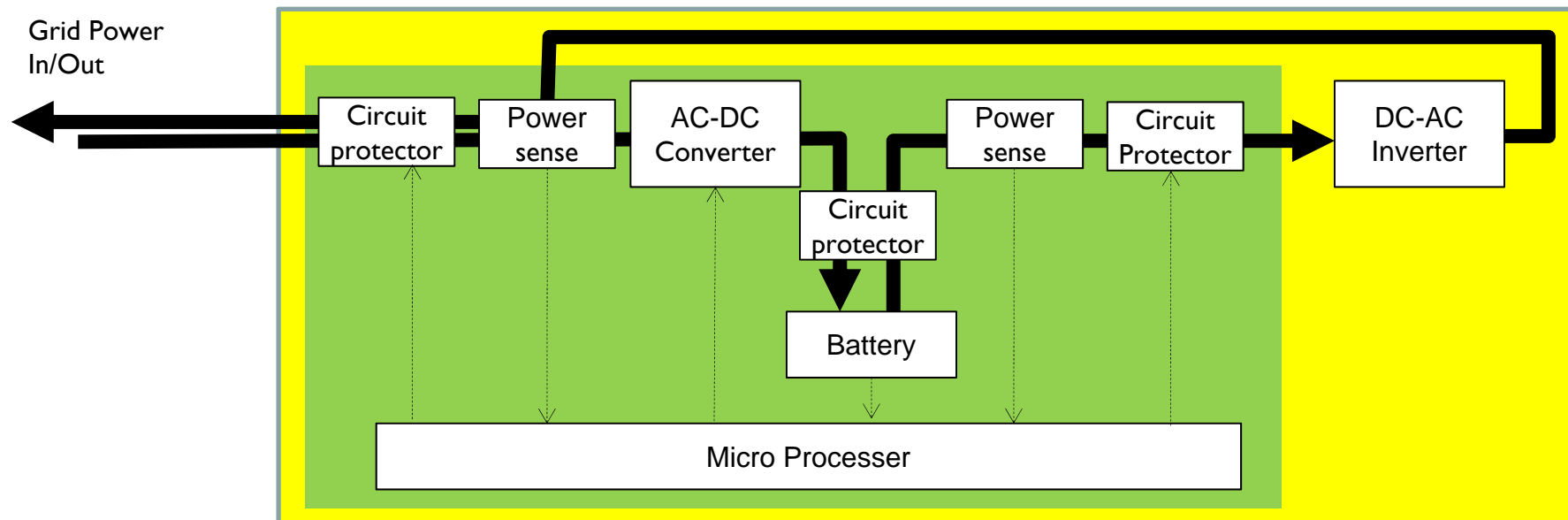
How the system Works

This Energy storage system charges the integrated lithium ion battery from electrical utility grid through the distribution panel automatically when the battery’s capacity is not full and its charging period is controlled by the home energy management system (HEMS) which is specially by Sony Corporation.

This Energy storage system outputs the electricity to electrical utility grid through the distribution panel when determine the signal from HEMS. HEMS creates more efficiency control of the electrical power. To equalize the power demand to save the peak value so that the contract price is able to be saved and it’s benefit for the house owner.

The system structure

This Energy storage system is integrated lithium ion battery, AC-DC converter and DC-AC inverters. General block diagram is bellow.



The Energy Storage System Installation

Follow the instructions in this section to install the energy storage system.



CAUTION : Before installing the energy storage system, read all instructions and cautionary markings in the installation manual.



CAUTION : Perform all electrical installations in accordance with all local electrical codes and the National Electrical Code(NFC), ANSI/NFPA 70.



CAUTION : Connect the energy storage system to the electrical utility grid only after receiving prior approval from the utility company.



CAUTION : Be aware that only qualified personnel should must connect the energy storage system to the electrical utility grid.



CAUTION : Be aware that installation of this equipment includes risk of electric shock. Normally grounded conductors may be undergrounded and energized when a ground fault is indicated.

Parts Included

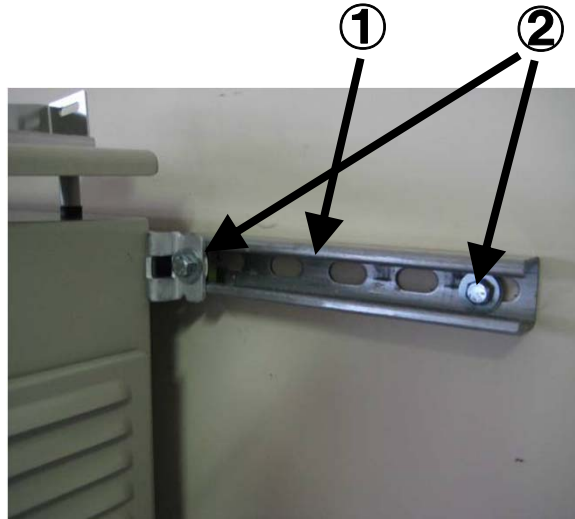
In addition to the energy storage system, battery module, you'll need the system installation kit. This kit includes the following items :

- Screws
- Mounting Bracket
- Antenna for WiFi module, Pipe and plastic case for Antenna.

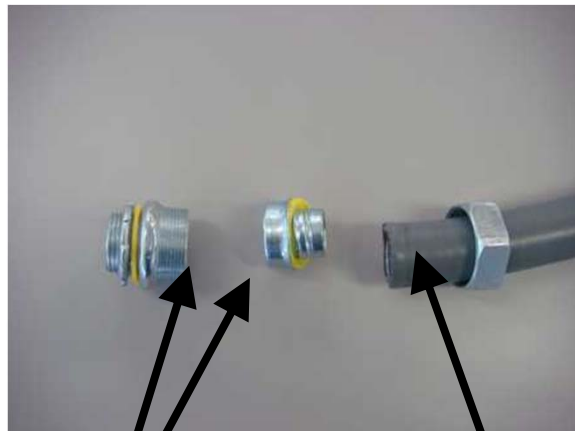
Energy Storage System “IJ1001SNBT”

Other Parts and Tools Required

In addition to the energy storage system and its associated hardware, you will need to provide the followings. The rating of the parts described on Page 50 to 54.



- ① Rail
- ② Fixing bolt
- ③ Connection box
- ④ Connector
- ⑤ Conduit pipe
- ⑥ Fixing parts



④

⑤

⑥

Energy Storage System “IJ1001SNBT”

Other Parts and Tools Required



- ① Screw Driver (+) Φ6mm(#2)
- ② Screw Driver (+) Φ5mm(#1)
- ③ Stabi. Driver (+) Φ6mm(#2)
- ④ Nipper
- ⑤ Pench
- ⑥ Wire stripper
- ⑦ Hammer
- ⑧ Measure
- ⑨ Jig for removing the door

Energy Storage System “IJ1001SNBT”

Installation Procedure

Installing the energy storage system involves several key steps :

- 1, Open the cargo and Take out the energy storage server from outer enclosure.
- 2, Open the energy storage server using screw driver and install the lithium ion battery module.
- 3, Set the outer enclosure to the wall
- 4, Install the energy storage server into the outer enclosure.
- 5, Assemble the WiFi antenna to the outer enclosure.
- 6, Set the connecting box and conduit

<Reference> Screws



- ① Low head screw (M3×8mm) × 7pcs
- ② Low head screw (M4×10mm) × 2pcs
- ③ Screw (M4×10mm) × 5pcs
- ④ Low head screw (M4×8mm) × 8pcs
- ⑤ Screw (M4×8mm Black) × 3pcs
- ⑥ Screw (M3×10mm Black) × 12pcs
- ⑦ Screw (M3×8mm Black) × 2pcs
- ⑧ Screw (M5×10mm) × 6pcs

Energy Storage System “IJ1001SNBT”

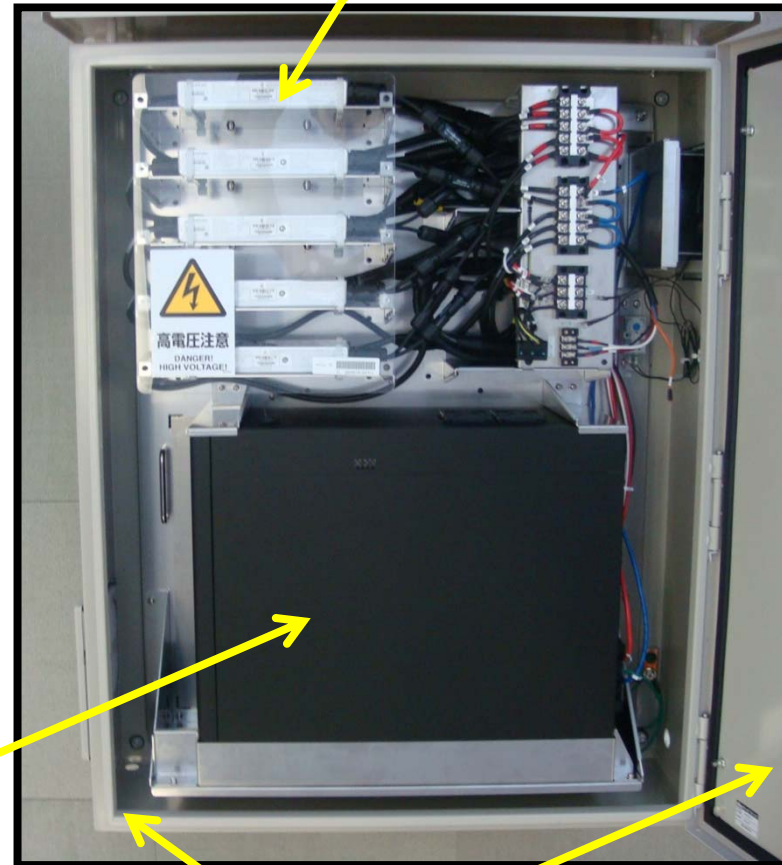
Open the cargo and Take out the energy storage server from outer enclosure

Description

Energy Storage System



Inverter



Energy Storage Server

Outer Enclosure

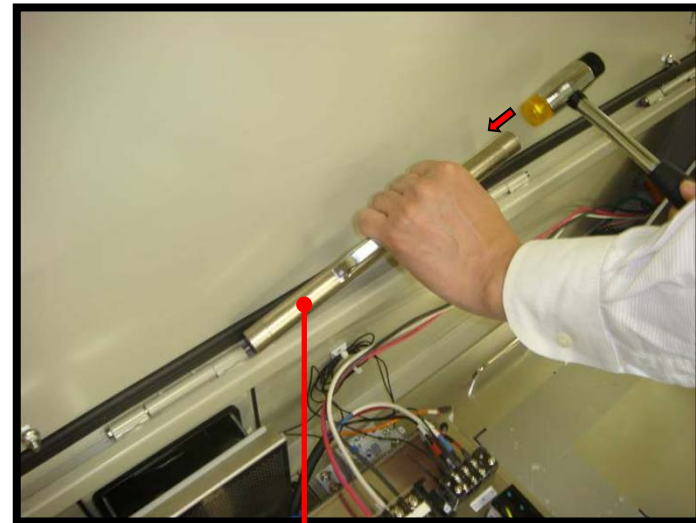
Energy Storage System “IJ1001SNBT”

Open the cargo and Take out the energy storage server from outer enclosure

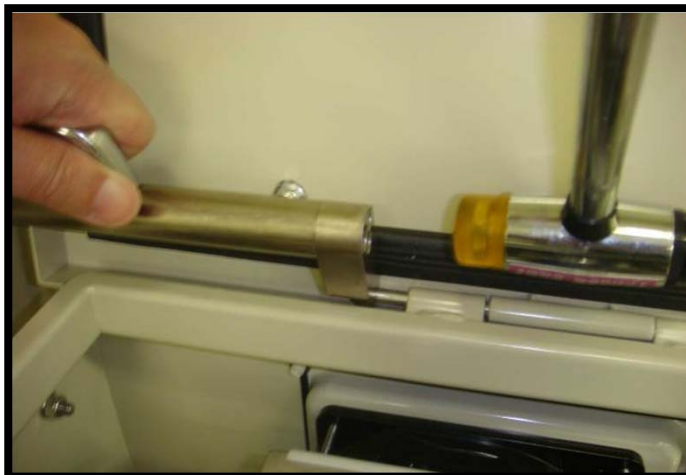
Remove the front door (Optional)



Front door



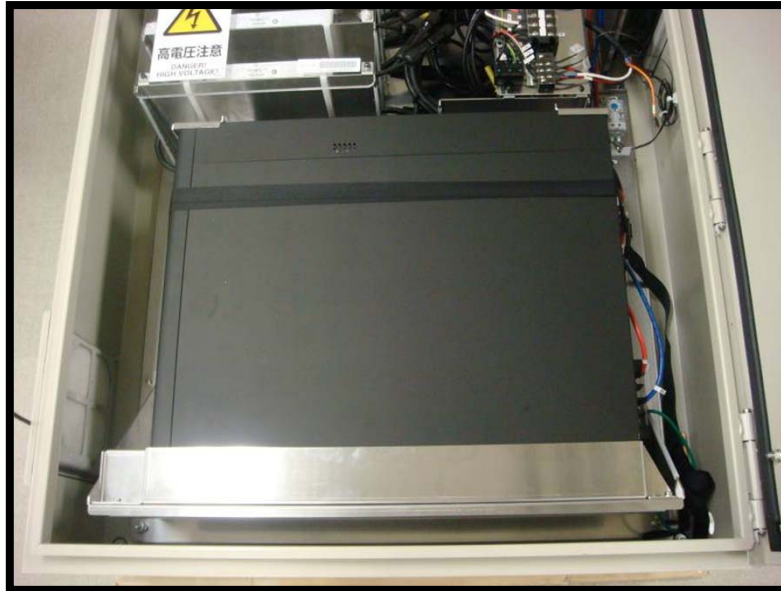
Tool ⑨ refer to Page 9



Energy Storage System “IJ1001SNBT”

Open the cargo and Take out the energy storage server from outer enclosure

Remove the belt.

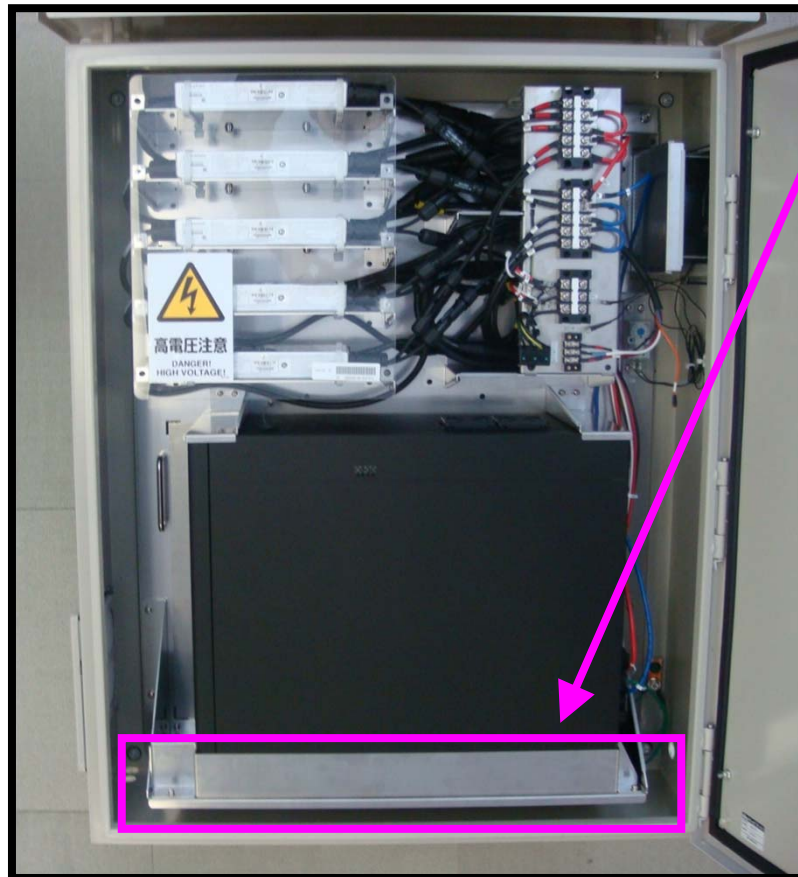


It won't be used. Can be disposed.

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Open the cargo and Take out the energy storage server from outer enclosure

Remove the jig-3.



Jig-3

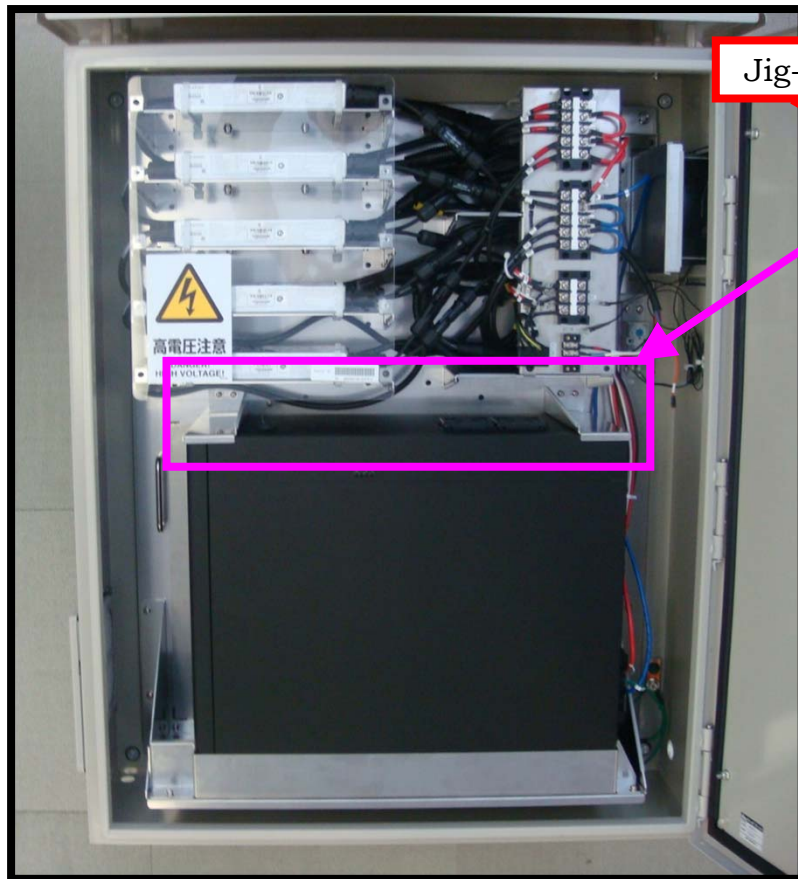


The screw removed won't be used.
It can be disposed.

Energy Storage System “IJ1001SNBT”

Open the cargo and Take out the energy storage server from outer enclosure

Remove the jig-4,5.



Jig-4



Jig-5

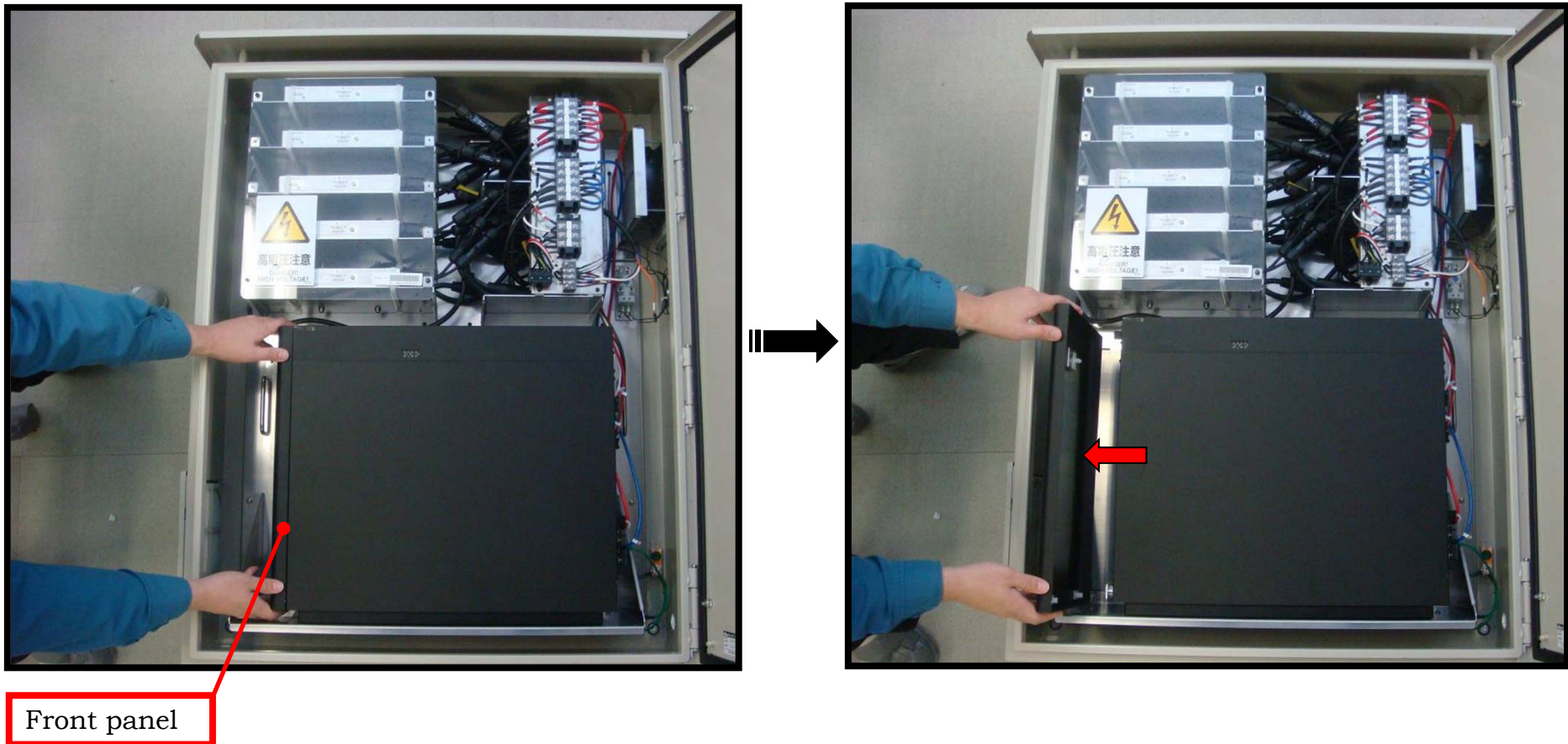


The screw removed won't be used.
It can be disposed.

Energy Storage System “IJ1001SNBT”

Open the cargo and Take out the energy storage server from outer enclosure

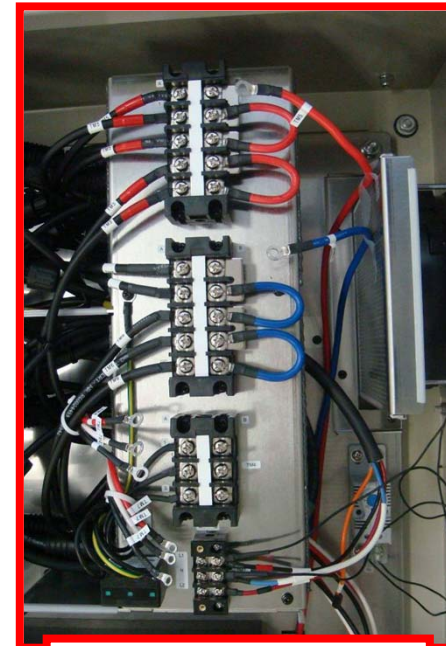
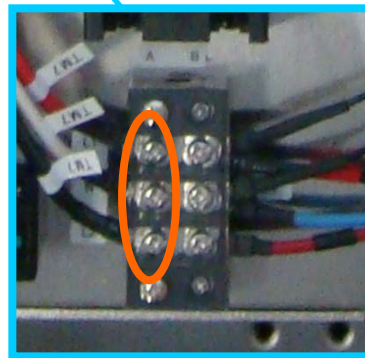
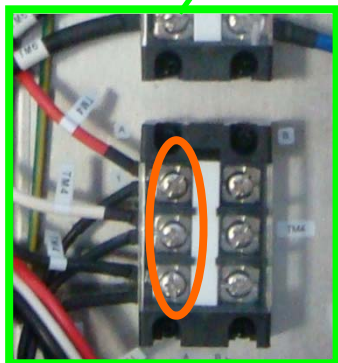
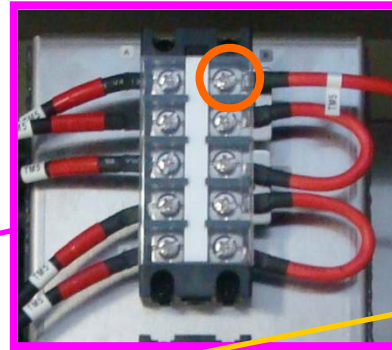
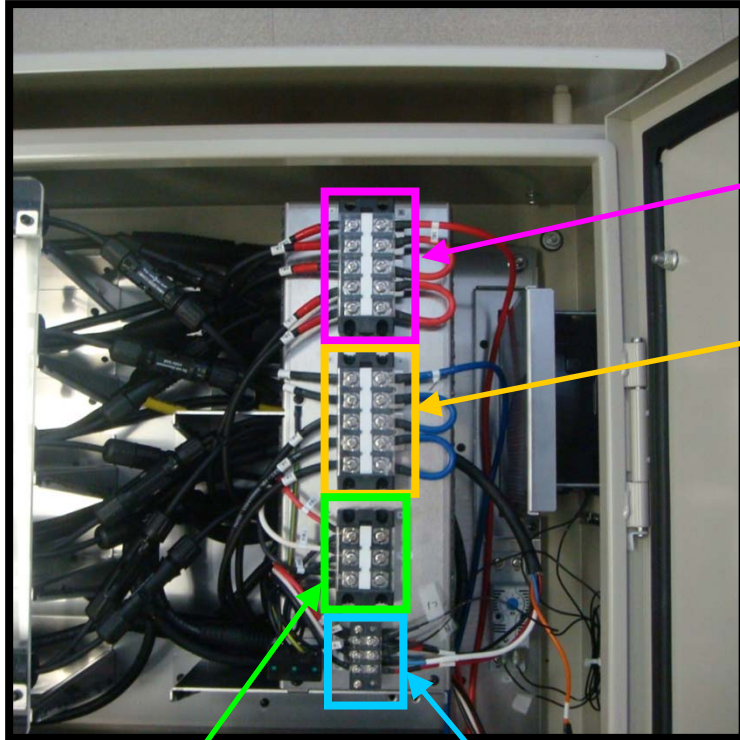
Remove the front panel of the energy storage server.



Energy Storage System "IJ1001SNBT"

Open the cargo and Take out the energy storage server from outer enclosure

Remove the cables bellow.

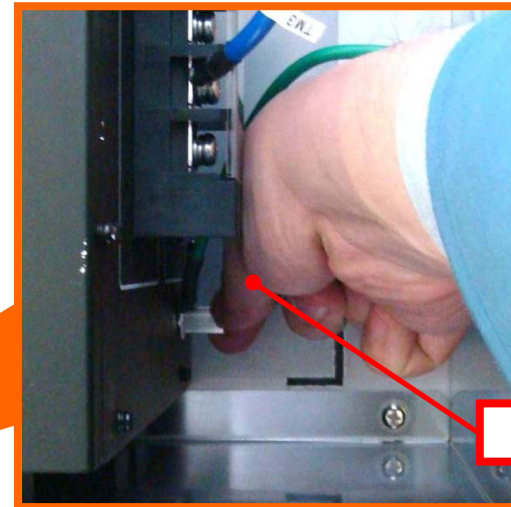
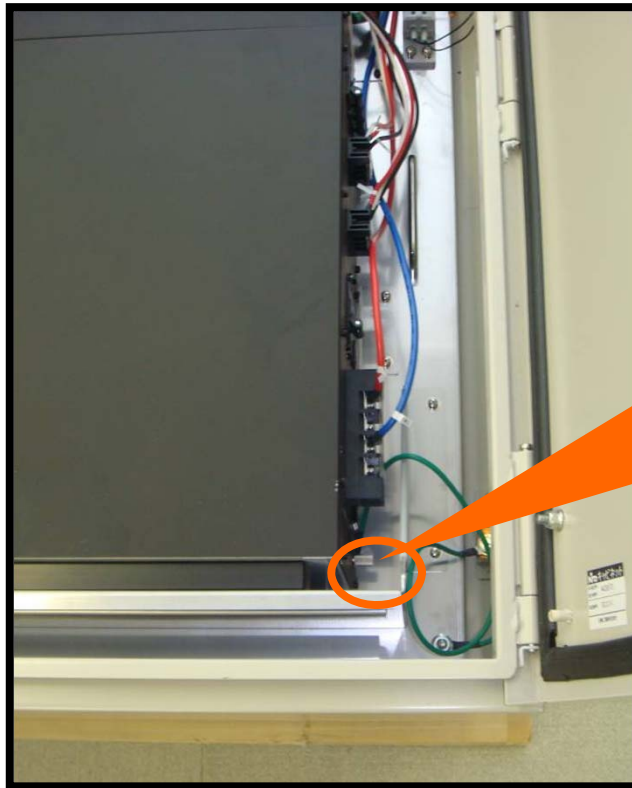


Completed photo

Energy Storage System “IJ1001SNBT”

Open the cargo and Take out the energy storage server from outer enclosure

Remove the wire from ground terminal on the rear panel of energy storage server.



Ground terminal

