

## HV Avalon ESS Updating Guide:

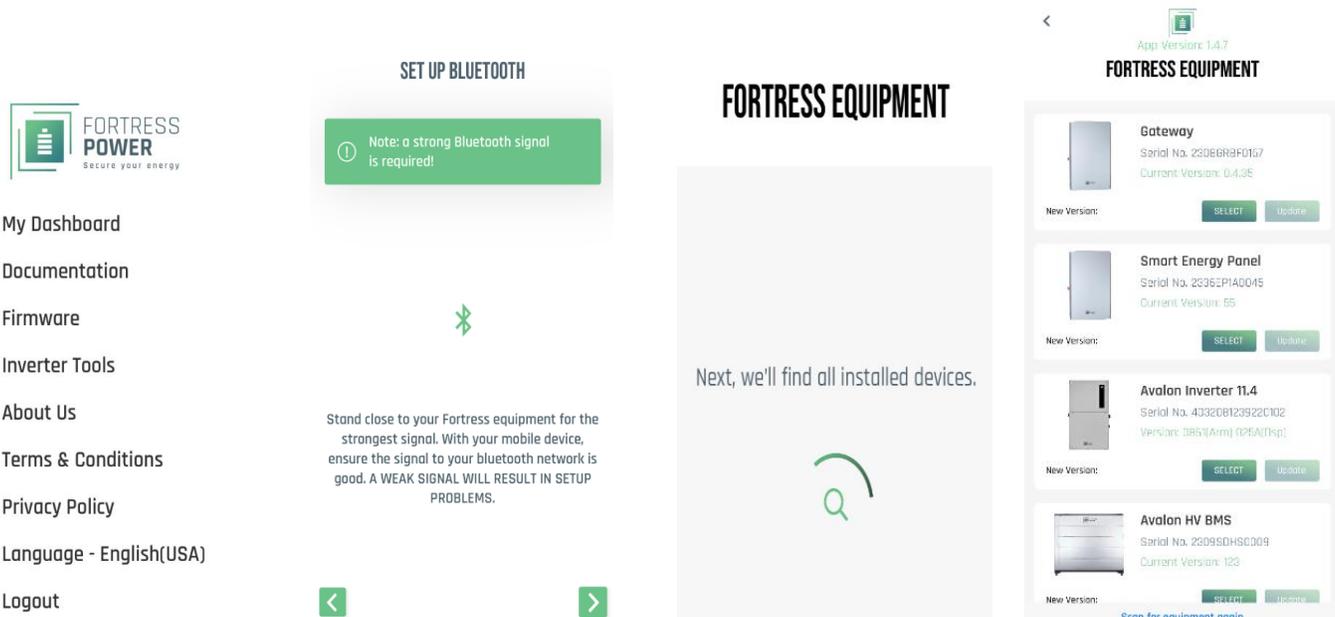
### 1: Using the Installer App

1. Access the Firmware Update Feature
  - Open the Installer App
  - Navigate to the side menu and select “Firmware”
2. Connect to Bluetooth
  - Search for the Gateway.
  - Connect to the Fortress equipment (the gateway serial number can be found inside the SEP door.)
3. Select the Product to Update
  - Choose the product that needs to be updated from the list.
4. Download AND Update Firmware
  - Download the latest firmware version to your device.
  - Select the option to update the firmware.
  - Wait for the update process to complete. Verify the update by checking the product status.

#### \*\* Note on Power Interruptions

During the update, SEP, BMS, and PCS will restart.

The home will lose power until the restart is completed.



The image displays four screenshots from the Fortress Power Installer App:

- Screenshot 1 (Left):** Shows the app's side menu with options: My Dashboard, Documentation, Firmware, Inverter Tools, About Us, Terms & Conditions, Privacy Policy, Language - English(USA), and Logout.
- Screenshot 2:** Titled "SET UP BLUETOOTH", it features a green notification box stating "Note: a strong Bluetooth signal is required!". Below is a Bluetooth icon and instructions: "Stand close to your Fortress equipment for the strongest signal. With your mobile device, ensure the signal to your bluetooth network is good. A WEAK SIGNAL WILL RESULT IN SETUP PROBLEMS." Navigation arrows are at the bottom.
- Screenshot 3:** Titled "FORTRESS EQUIPMENT", it displays the text "Next, we'll find all installed devices." with a magnifying glass icon.
- Screenshot 4 (Right):** Titled "FORTRESS EQUIPMENT", it lists four devices with their serial numbers, current versions, and update options:
  - Gateway:** Serial No. 23086R9FD167, Current Version: 0.4.3E. Buttons: SELECT, Update.
  - Smart Energy Panel:** Serial No. 23362PIA0045, Current Version: B5. Buttons: SELECT, Update.
  - Avalon Inverter 11.4:** Serial No. 43320B123922C102, Version: 0B5(Arm) 0P5A(Tsp). Buttons: SELECT, Update.
  - Avalon HV BMS:** Serial No. 23095DH5C009, Current Version: 123. Buttons: SELECT, Update.

### Important Notes:

- When using the installer App, it utilizes BLE. **Keep your device close to the product until the update is finished.**
- Do not update multiple PCS in parallel. It is recommended to update each PCS separately.

### Recommended Update Sequence:

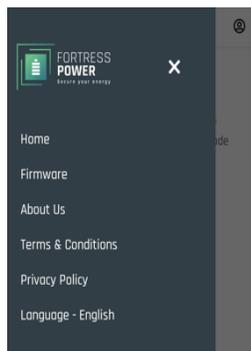
1. Gateway
2. SEP
3. HMI

## 2. Using the Fortress Power Homeowner App

1. Initiate the OTA Update
  - Open the Fortress Power Homeowner App.
  - This method uses Over-The-Air (OTA) updated, allowing remote updates. However, it is recommended to be next to the product during the update process.
2. Select the Product to Update
  - Choose the product that needs to be updated.
  - Select the newly released firmware version.
3. Verify and Complete the Update
  - Wait for the update to finish and verify by checking the product status.

### \*\* Note on Power Interruptions

- During the update, SEP, BMS and PCS will turn off and restart.
- During the PCS update, the BMS light may turn red. This is normal; do not turn off the power.



### 3: Using the Web Console

#### 1. Prepare for the Update

- Download the firmware version onto your laptop.
- Add the Gateway to the Wi-Fi network or connect it directly to Ethernet.
- Ensure both the laptop and the Gateway are on the same network.

#### 2. Find the IP Address

- Use the Installer App's Network connection feature.
- Press the Wi-Fi icon on the HMI
- Check the laptop network settings to find the device 's IP address.

#### 3. Access the Update

- Select the OTA (Over-The-Air) update option.
- Choose the product that needs to be updated.
- Press the update button and wait for the process to complete.

**Fortress-Guardian**

Web Console

DEBUG

OTA

PCS Parallel Connection

Point Table

**Local OTA Tool**

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**Guardian**

SN: 2308GRBF0167 Version: 0.4.35

choose OTA file: Choose File No file chosen Upgrade

Note: Please FORCE reload (CTRL + F5) the browser after upgrading success!

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**Smart Energy Panel**

SN: 2336EPIA0045 Version: 55

choose OTA file: Choose File No file chosen Upgrade

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**Avalon HV BMS**

**Avalon HV BMS**

SN: 2309SDHS0009 Version: 123

**Avalon HV BMS**

SN: 2309SDHS0051 Version: 123

choose OTA file: Choose File No file chosen Upgrade

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**Inverter**     ARM  DSP

**Avalon Inverter 11.4**

SN: 4032081239220083 ARM Version: 0861 DSP Version: 026E  
SN: 4032081239220102 ARM Version: 0861 DSP Version: 026E

choose OTA file: Choose File No file chosen Upgrade

## Updating HMI (LCD) Using an SD Card

1. Prepare the SD Card
  - Download the bin file to your laptop
  - Rename the file to ota.bin
  - Transfer the file to an SD card.
2. Prepare the SEP
  - Turn the eSTOP knob on the SEP to STOP
3. Insert the SD Card
  - Insert the SD card into the slot under screen on the left side of the HMI.
4. Update via HMI
  - Follow the instructions displayed on the HMI screen.
  - Wait for the update to complete. You will see a message indicating a successful update.
5. Complete the Process
  - Remove the SD card.
  - Turn the eSTOP knob to RUN
  - Ensure all products are updated.

\*\* Note: This method is only for updating the HMI