

Sungrow Single Phase Inverter Commissioning Guide

Disclaimer

The material in this document has been prepared by Sungrow Australia Group Pty. Ltd. ABN 76 168 258 679 and is intended as a guideline to assist solar installers for troubleshooting. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on Sungrow equipment.

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This document only applies to Sungrow single-phase inverters G2 inverters and Premium versions (including SG2K-S, SG3K-S, SG3K-D, SG4K-D, SG5K-D, SG6K-D and SG8K-D).

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are several factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Sungrow Power may change to this document without notice as we continuously improving our services.

If you have any questions relation to Sungrow Single Phase Inverter commissioning procedures, please take photos if you are on site and contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au, Monday-Friday 9am - 5pm (AEDT).

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1. Download iSolarCloud App

Search iSolarCloud in App Store or Google Play Store or scan the QR code below to download and install iSolarCloud on the mobile.



2. Create Account and Plant

Open iSolarCloud, register an account if you do not have one. Choose the account type and complete registration. Login the account and click “” on top right corner to create a new plant.

The image displays three screenshots of the iSolarCloud mobile application. The first screenshot (left) shows the login screen with fields for 'Account' and 'Password', and buttons for 'LOGIN' and 'REGISTER'. The second screenshot (middle) shows the 'USER REGISTRATION' screen with tabs for 'Distributor/Installer' and 'End User'. It includes fields for 'International Server', 'Email', 'Verification Code', 'Password', 'Confirm Password', 'Australia', '(UTC+11:00) Magadan', 'ABN', 'Company Name', and 'Code of Upper Level Installer/Distributor'. The third screenshot (right) shows the 'Plant Status' screen with a list of plants, each displaying 'Equivalent Hours', 'Today Yield', and a 'RESUME COMMISSIONING' button. A red box highlights the plus icon in the top right corner of the app interface.

3. Starting Up the Inverter

3.1 Start Up on Inverter Screen

Turn on the AC and DC switches to start up the inverter. Select the country “AU” and the network the inverter connected to. Wait until the inverter completed initializing and start to work.



AG=Ausgrid

EE=Ergon Energy

PN=SA Power Networks

PC=Powercor

WP=Western Power

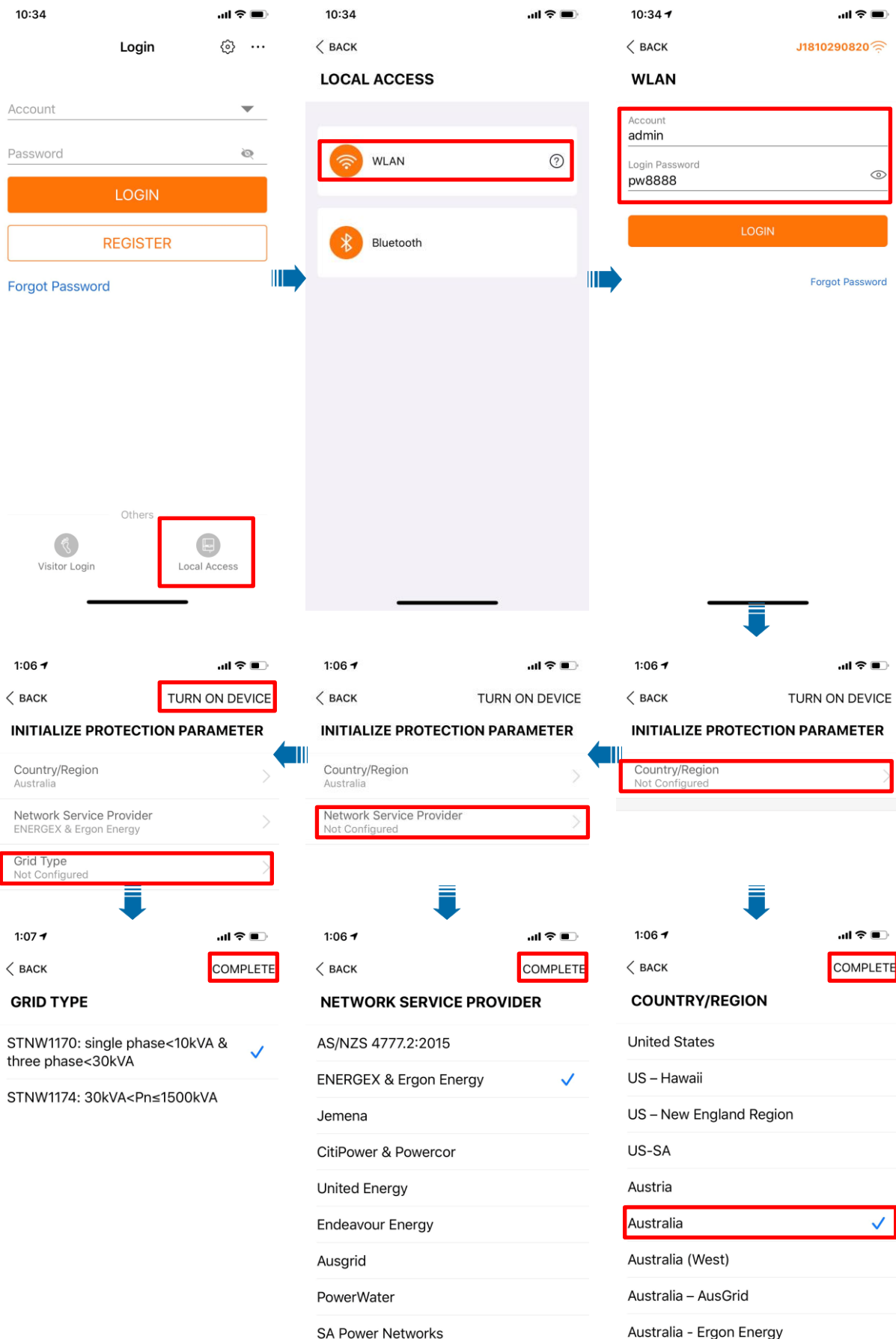
EG=Energex

Note: The pre-set grid settings on inverter screen may not be correct or completed, we highly recommend initializing the inverter through iSolarCloud app.

3.2 Start Up on iSolarCloud App

Turn on the AC and DC switches to start up the inverter. Instead of operating on inverter screen, open iSolarCloud.

Local Access -> WLAN -> Login inverter with the account “**admin**” and password “**pw8888**” -> Country/Region-> Australia (**do not select other Australia networks**) -> Network Service Provider -> Select the NSP, if not specified, select AS/NZS 4777.2:2015 -> Grid Type -> Select specific grid type -> TURN ON DEVICE

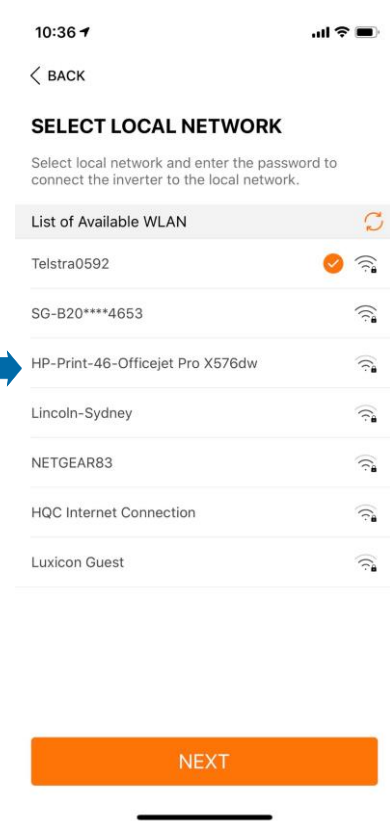
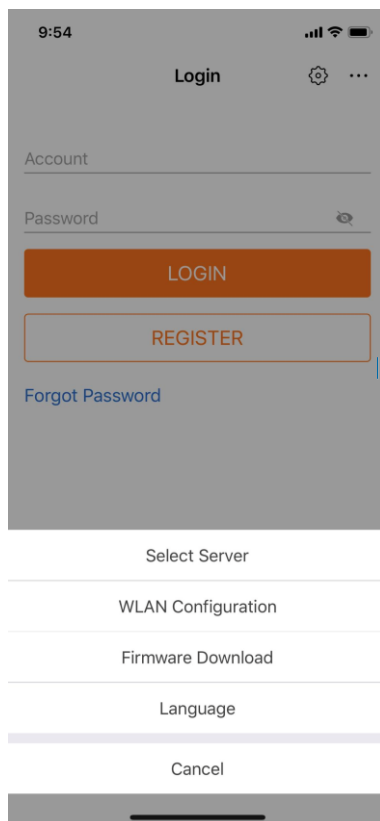


4. WiFi Configuration

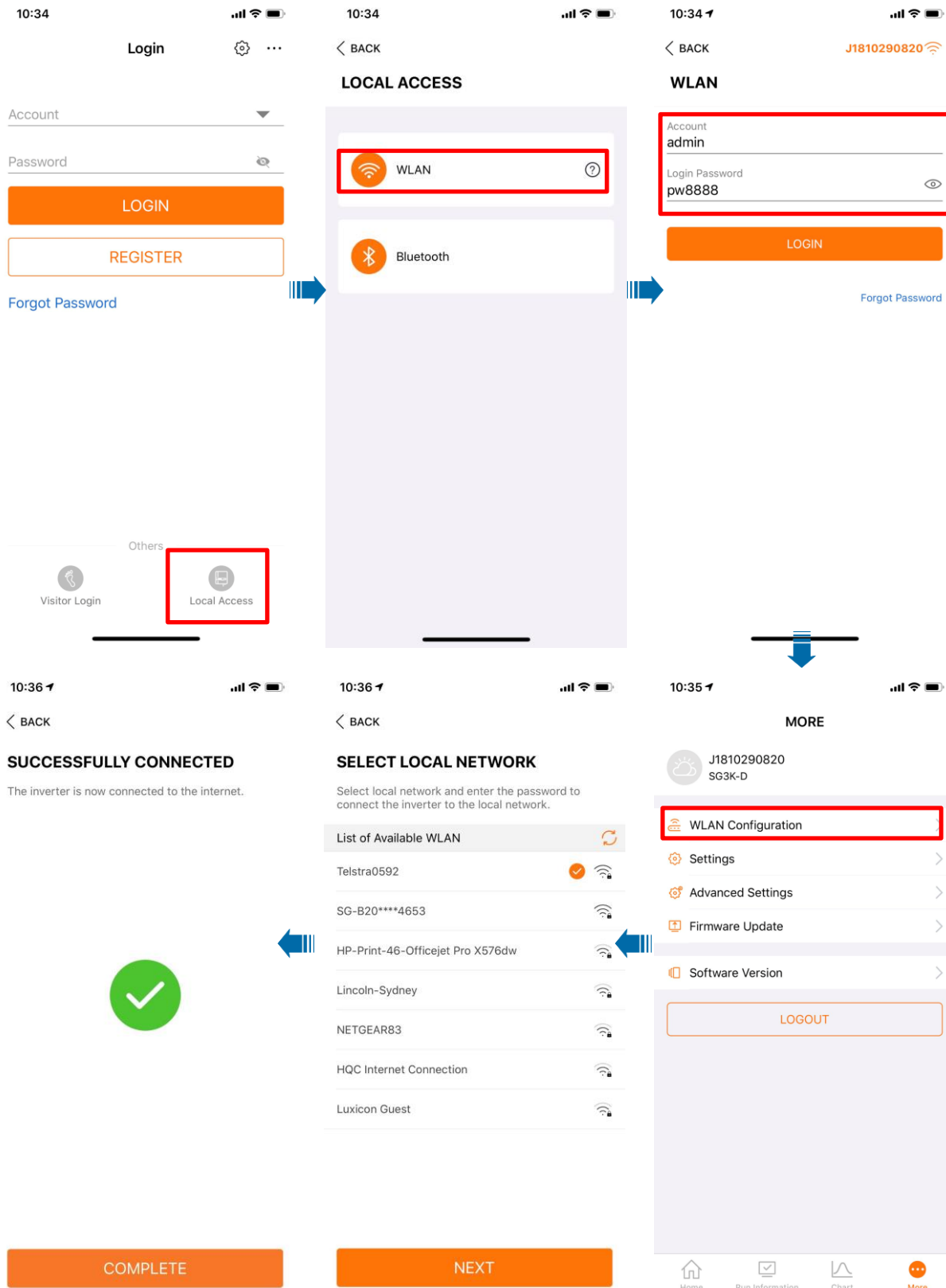
- 1) Insert WiFi dongle to the inverter and wait until the first LED light which labelled as "RUN" turns on.
- 2) In mobile WiFi settings, search for the WiFi "SG-XXXXXXX" and connect. If a password required, use the serial number of the dongle as the password.
- 3) Choose either Method 1 or Method 2 below to complete WiFi configuration
- 4) After connecting successful, all three LED lights on WiFi dongle should be on.



Method 1: Open iSolarCloud -> click “⚙️” -> select “WLAN Configuration”-> Scan the QR code on the WiFi dongle -> select the WiFi network and put in the password.



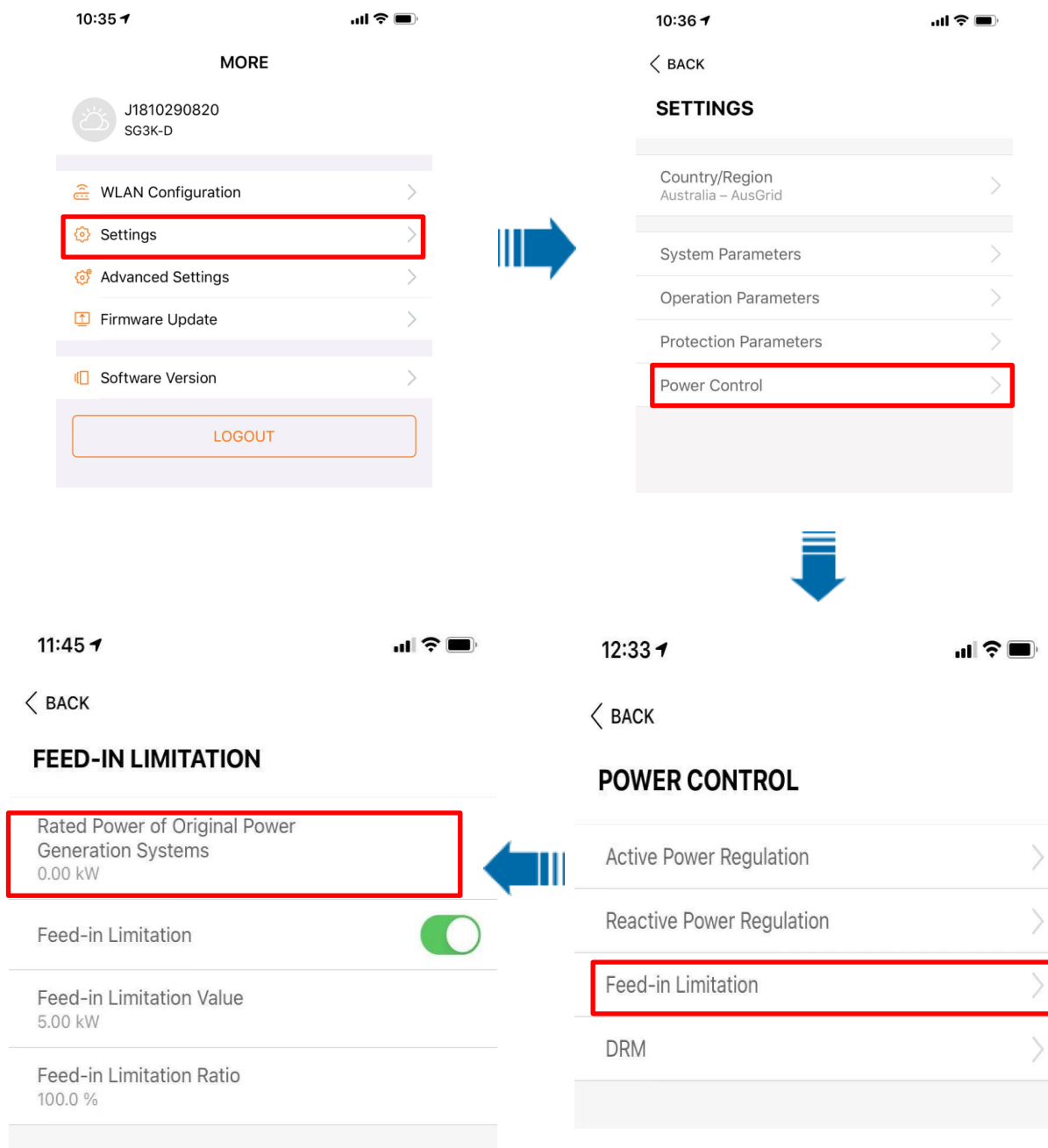
Method 2: Open iSolarCloud -> Local Access -> WLAN -> Login inverter with the account “admin” and password “pw8888” -> WLAN Configuration -> select the WiFi network and put in the password.



5. Retrofit Setting (Existing System)

Note: SG3K-D_SG5K-D_CrysG2D_V65_20210527.zip & SG8K_D_CrysG2D_V42_20210319.zip firmware version or later. Please ensure you update to the latest firmware version.

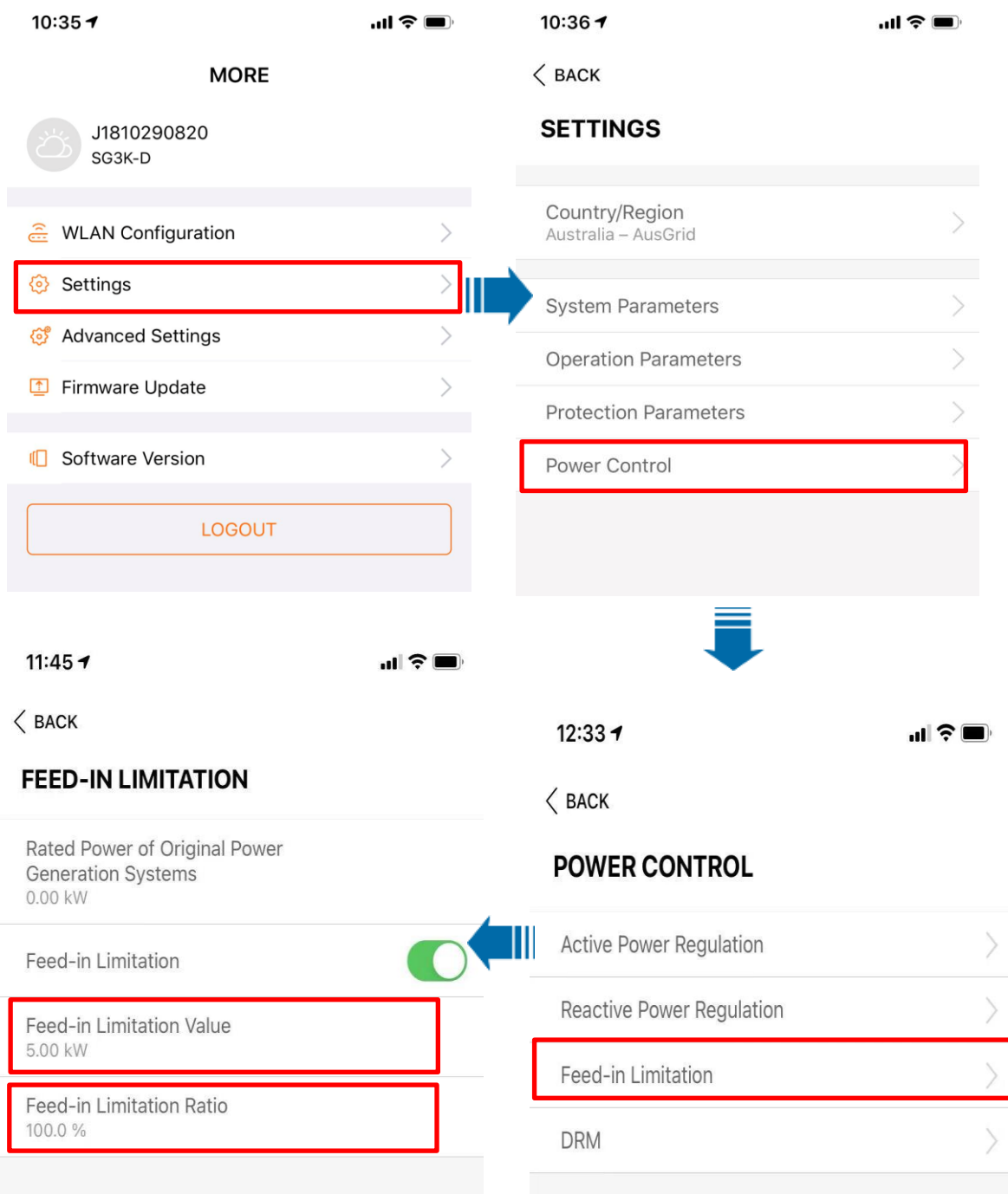
Access the inverter through WLAN (refer 3.2) -> Go to “More”-> “Settings” -> “Power Control” -> “Feed-in Limitation” -> Put the existing inverter rated power in “Rated Power of Original Power Generation Systems”.



6. Export Limit Setting

Note: SG3K-D_SG5K-D_CrysG2D_V65_20210527.zip & SG8K_D_CrysG2D_V42_20210319.zip
firmware version or later. Please ensure you update to the latest firmware version.

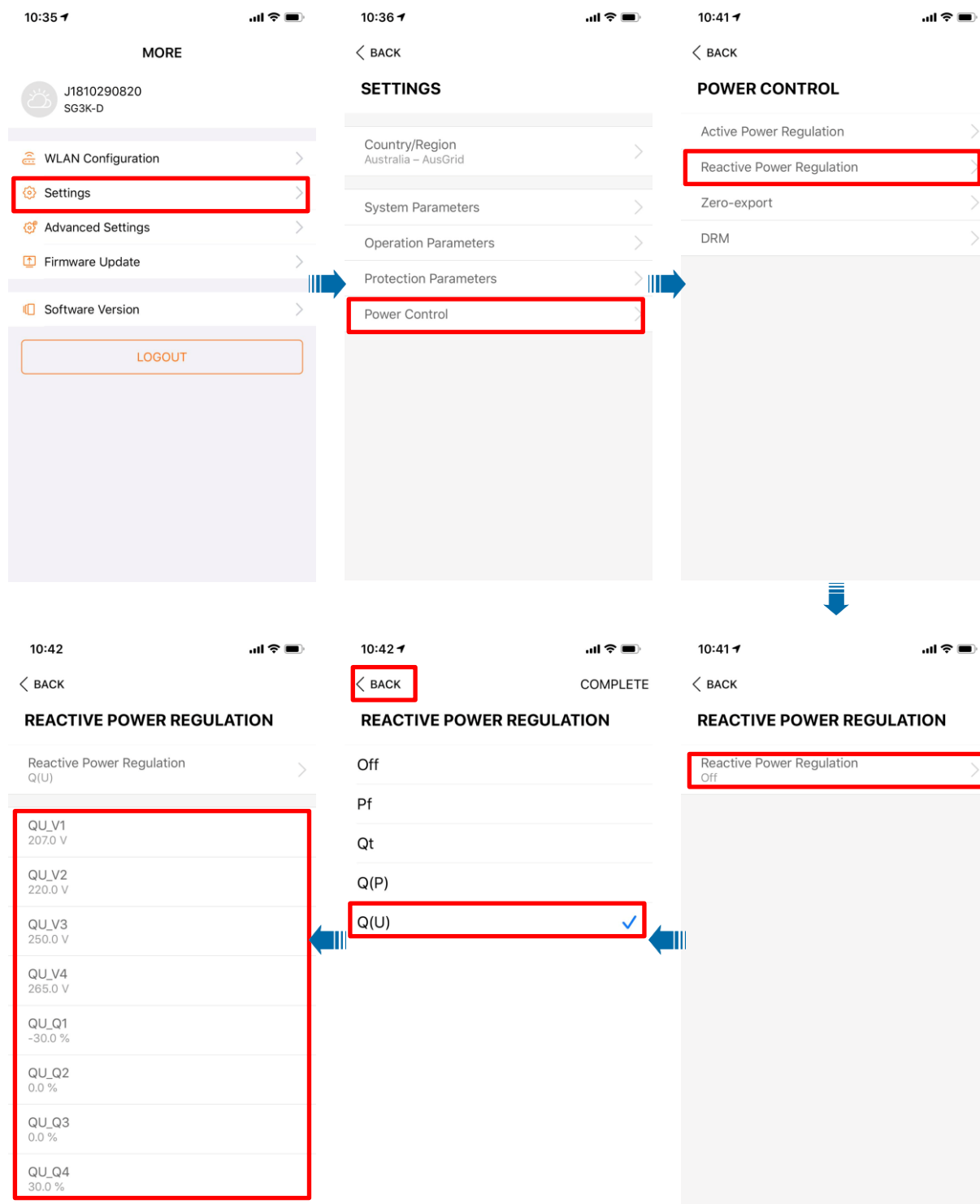
Access the inverter through WLAN (refer 3.2) ->Go to “Settings” -> “Power Control” -> “Feed-in-Limitation” -> Turn on Feed-In-Limitation ->Put the allowed feed-in power in “Feed-in-Limitation Value” -> Put the ratio in “Feed-in-Limitation ratio” (For example, A 5KW system having a 3KW export limit will have the ratio of 60%)



7. Power Response Mode Setting

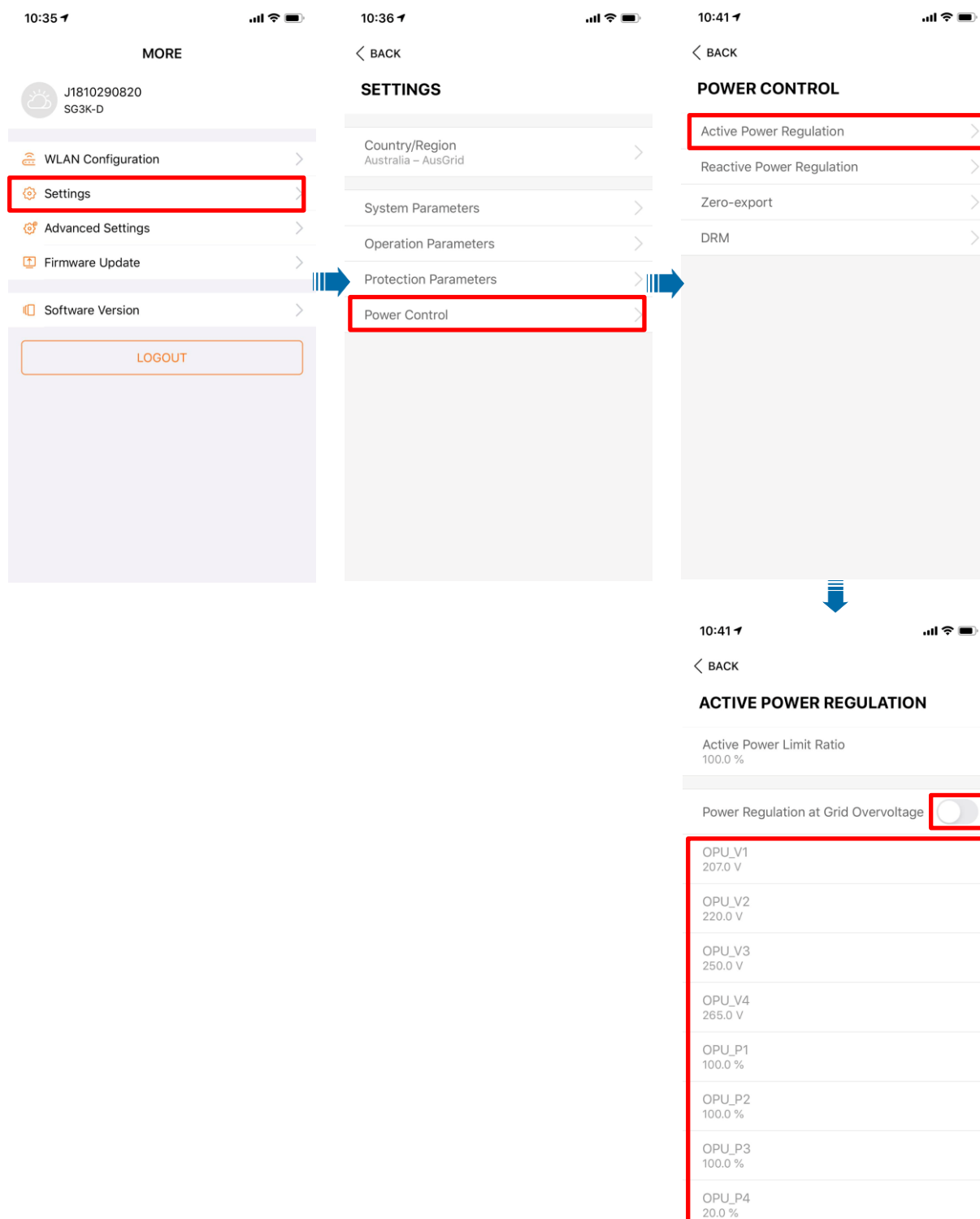
7.1 Volt-Var Setting

Access the inverter through WLAN (refer 3.2) -> Go to “Settings” -> “Power Control” -> “Reactive Power Regulation” -> “Reactive Power Regulation” -> “Q(U)” -> “BACK” -> Input the voltage levels and associate reactive power in percentage (%)



7.2 Volt-Watt Setting

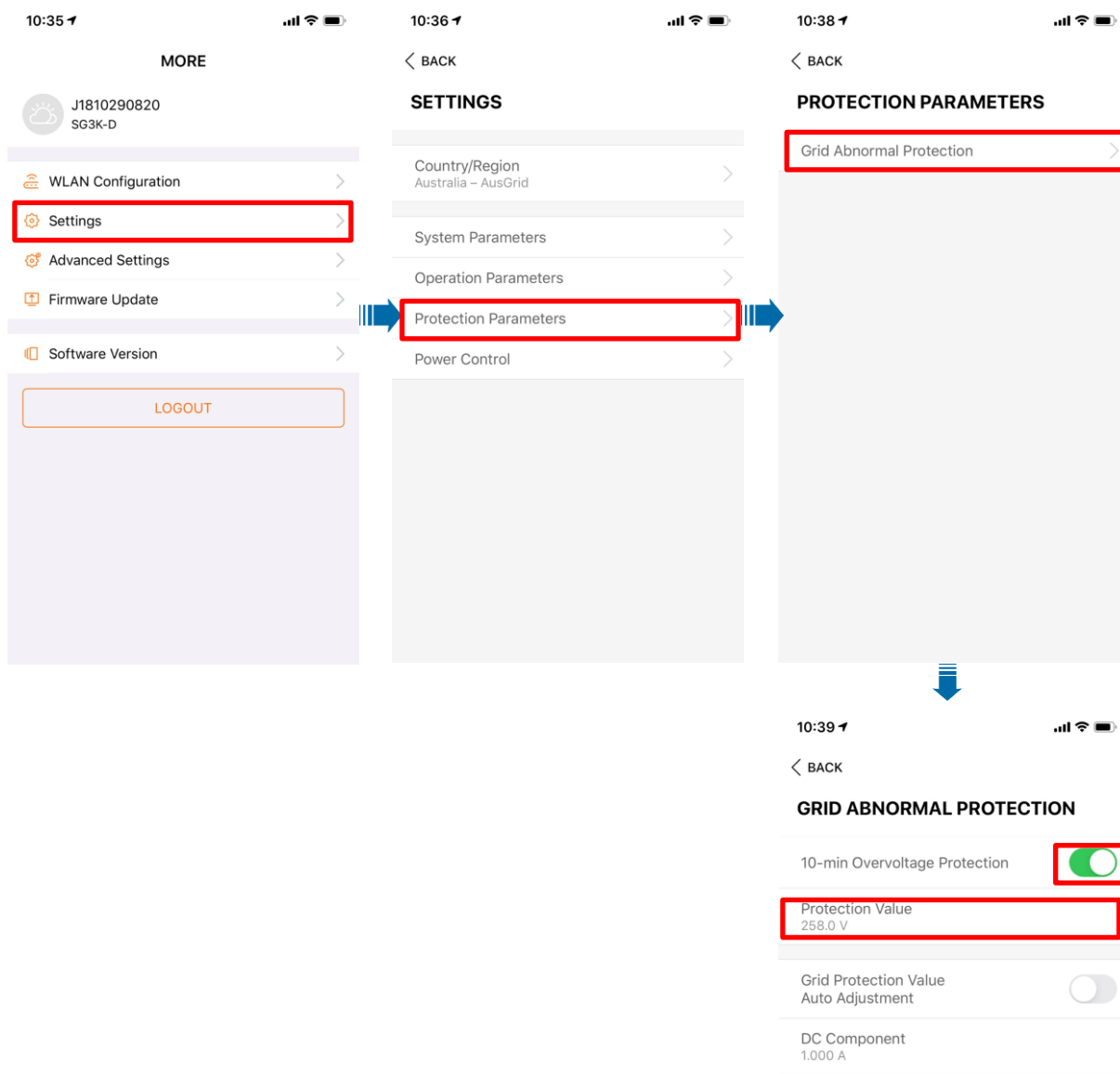
Access the inverter through WLAN (refer 3.2) -> Go to “Settings” -> “Power Control” -> “Active Power Regulation” -> Turn on “Power Regulation at Over Voltage” -> Input the voltage levels and associate active power in percentage (%)



8. Overvoltage Protection Settings

Access the inverter through WLAN (refer 3.2) -> Go to “Settings” -> “Protection Parameters” -> “Grid Abnormal Protection” -> Turn on “10-min Overvoltage Protection” -> Input the voltage in “Protection Value”

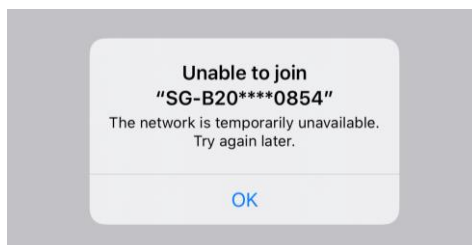
Note: the 10-min overvoltage protection value can only be modified by a licenced electrician in accordance with DNSP's requirements.



9. Common Issue

9.1 Cannot Connect to SG Signal

It could happen sometimes that the mobile cannot join the SG signal of the dongle when doing WiFi configuration.



The reason for the problem is that the signal has been occupied by another device. In this case, it is necessary to check if the dongle is already connected with another mobile device such as iPad. After disconnecting the connection, try to connect to the SG network again.

9.2 Resume Commissioning

Sometimes when creating the plant on the iSolarCloud, the process might be stuck in resume commissioning. The reason for this is that the WiFi configuration has not been done properly. To rectify the issue, remove the WiFi dongle from the inverter and plug it in again. Then redo the WiFi configuration as per Section 4 in this document. To log out the app, follow the steps below.

