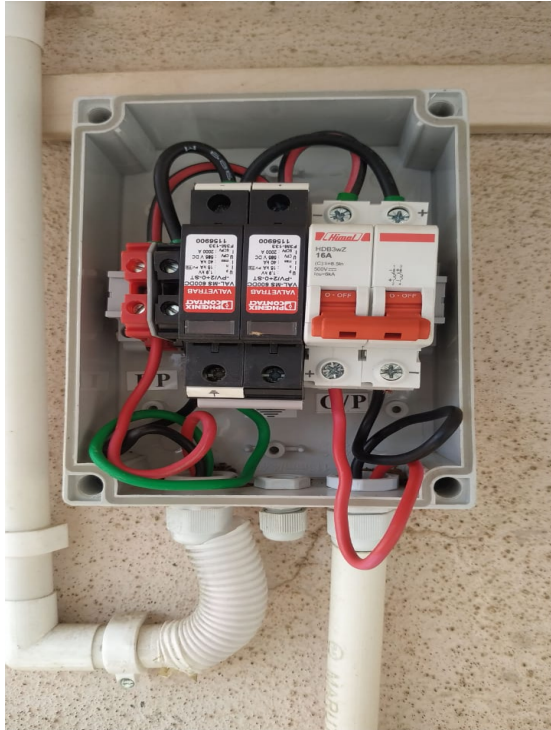# NORMAL ISSUES IN INVERTERS

1. INVERTER'S DISPLAY NOT TURN ON:

- Chances of Reverse Polarity

Solution:
- ❖ Turn off AC and DC.
- ❖ Check DCDB side wiring from Panel and IN/OUT of MCB.
- ❖ Remove Strings from inverter and Check voltage at Strings with Multimeter.
- ❖ After check Polarity, Verify tightness of + / - Cables of MC4 connectors.

2. <u>SWITCH ON DISPLAY AND FOUND LANGUAGE IS CHINESE:</u>

Solution:
- ❖ Switch on inverter by only DC supply.
- ❖ **Take images of**
- ❖ **Time - Date set in the Inverter, Serial number of Inverter.**
- ❖ **All these images need to change Language by use of Special PASSWORD.**
- ❖ Enter setting – language Change – Use Special password – Change language in English.

3. Grid voltage/frequency is too High:

Grid Voltage exceeds the safety value
1. Just a sudden vibration on the grid
2. Inverter is far from on-grid point

Solution:

1.The inverter will become normal automatically after grids voltage becomes normal
2. Locate the inverter near the on-grid point and use thicker cable.
3. If the regular voltage is high indeed , change the country code after checking with the grid operator. (**Country Code 22**: Europe General supports 283V).

4. PV isolation fault(ID56), bus voltage problem ID27:

The cable , connector , panel has short-circuit with ground
Cable Insulation break and short with DC side Earth.
Solution:
Turn off AC and DC
Check the isolation resistance of each string, at least 2M ohms
Check +DC and –DC string voltage w.r.t DC earth. (It should be ideally half of DC voltage)

5. AC ground fault :

The AC side has leakage current to ground
Solution:
Turn off AC and DC.
Check AC cable to see if there is short-circuit with ground,
Check If the PE cable(yellow-green, 4mm Cu) is connect correctly
Check N-E voltage (Ideally <5V).

BASICS SETTINGS OF INVERTERS:

1. Country Code Set :

Process 1:
- Switch Off the AC Supply of Inverter from ACDB
- Enter setting ----Set country potion-----Input Password----0001-----Then Set 22 -----Success.
- Switch off DC supply to turn off the Inverter. Keep the Inverter in OFF condition for 5 minutes.
- Switch on DC supply , display of inverter is ON and then turn on AC supply. Inverter will work on NORMAL condition.
-

Process 2:
- If Set country option shows disable then go to the Enset country option----If password ask---- enter 0001----- Enable ---success.
- Enter setting ----Set country potion-----Input Password----0001-----Then Set 22 -----Success.
- Switch off DC supply to turn off the Inverter. Keep the Inverter in OFF condition for 5 minutes.
- Switch on DC supply , display of inverter is ON and then turn on AC supply. Inverter will work on NORMAL condition.

2. Input Mode Set:

There are two types Input mode.
Set Independent mode as your input mode if you use SPD in DCDB same as number of MPPT of the inverter other wise set parallel mode.

- Switch Off the AC Supply of Inverter from ACDB
- Enter Setting----Input mode ---- If password ask----enter 0001---Set Independent or Parellel mode ------- Success .

- Switch off DC supply to turn off the Inverter. Keep the Inverter in OFF condition for 5 minutes.
- Switch on DC supply , display of inverter is ON and then turn on AC supply. Inverter will work on NORMAL condition.
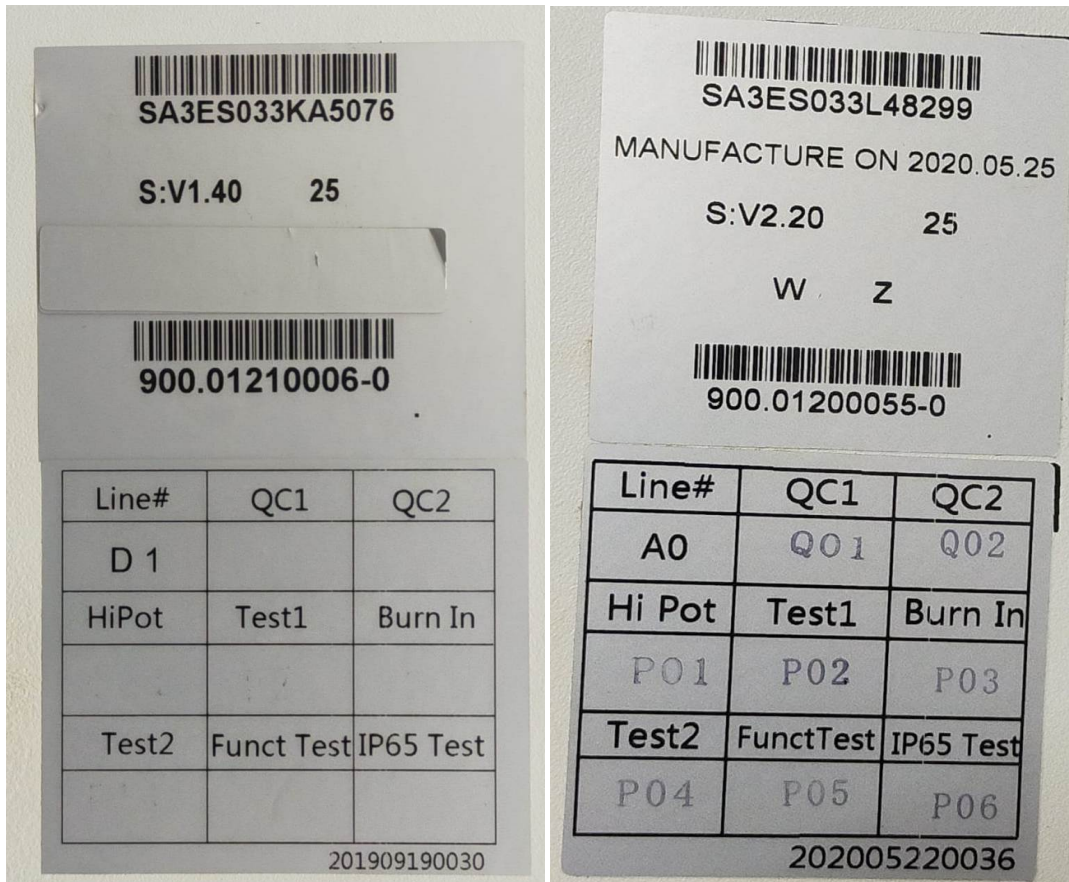
3. <u>SET TIME AND DATE:</u>

- Press ESC key in G2 model or Long press Button in G3 Model ----Enter setting ----Press enter key ---1st option is **Set time** ---- Press enter key to set time and date.
- So kindly set time and date in the Inverter. Time must be set in 24 Hr format.
- **Example: 1 P.M = 13.00 Set in the Inverter.**

- # <u>SOFTWARE UPDATE PROCESS FOR G2 and KTL-X MODELS</u>

1. Unzip the mailed file of firmware and extract it in laptop. After Unzip one firmware folder create and Inside that software files exists.

2. Turn Off Ac Supply of the Inverter.

3. Take Memory card from Inverter and Insert in Laptop via SD card. **[Don't insert Memory card in the Mobile]**

4. Copy Firmware folder from laptop to SD card.

5. Go to the Enter settings and Press down key to go System Update option.

6. Use password 0715 and update the firmware. Successful indication comes after firmware update process complete.

7. After this Please Restart your Inverter (off the DC Supply to turn off inverter, keep inverter in OFF condition for 5 Minutes, After 5 Minutes Just Switch ON DC supply).

8. Switch ON AC supply and check Inverter will work in Normal Mode
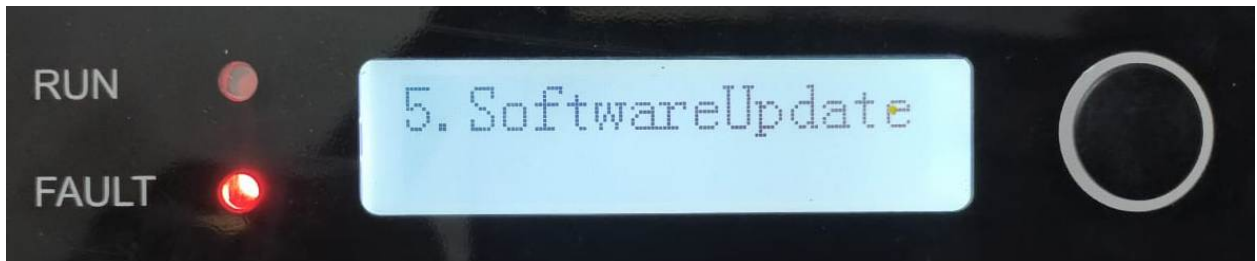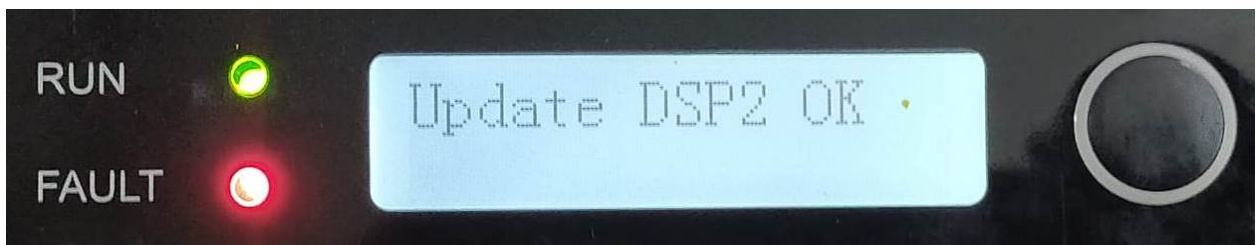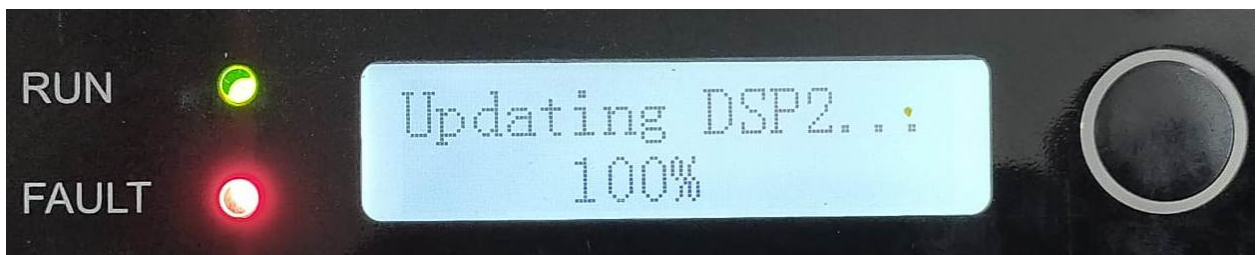
FIRMWARE UPDATE PROCESS FOR G3 inverters

SA3ES033KA5076

S:V1.40   25

900.01210006-0

Line#	QC1	QC2
D 1		
HiPot	Test1	Burn In
Test2	Funct Test	IP65 Test

201909190030

SA3ES033L48299

MANUFACTURE ON 2020.05.25

S:V2.20   25

W   Z

900.01200055-0

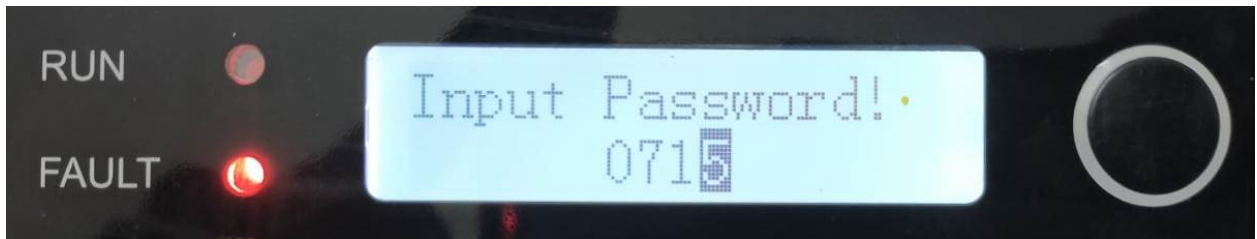| Line#	QC1	QC2
A0	Q01	Q02
Hi Pot	Test1	Burn In
P01	P02	P03
Test2	FunctTest	IP65 Test
P04	P05	P06

202005220036

Note:
- **Inbuilt Software version of the Inverter is below 1.9 then kindly update 1.84 firmware.**

- **Inbuilt Software version of the Inverter is above 1.9 then kindly update 2.60 firmware.**
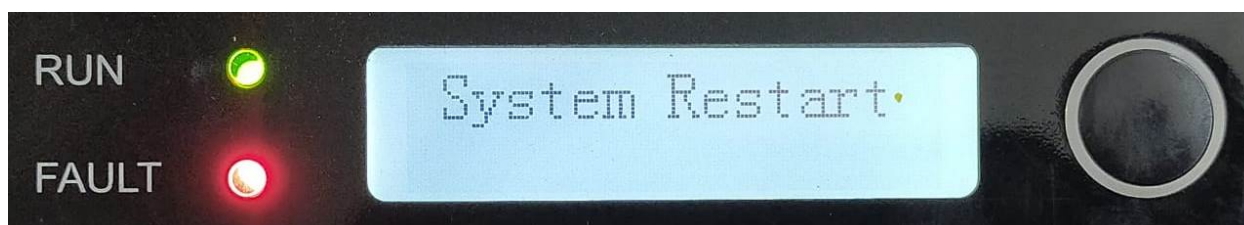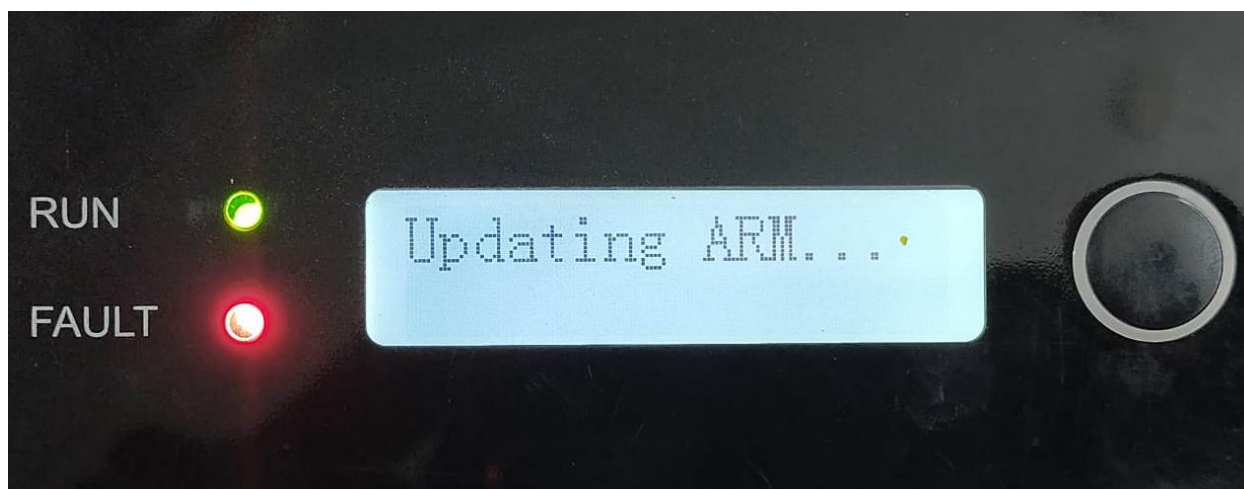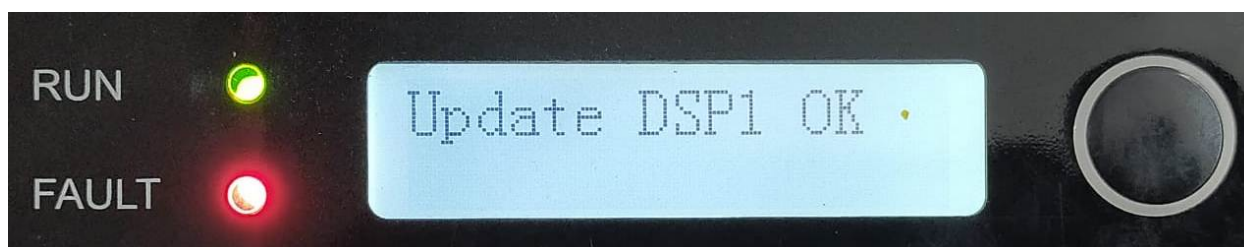
1. Unzip the mailed file of firmware and extract it in laptop. After Unzip one **firmware folder** create and Inside that software files exists.

2. Turn Off Ac Supply of the Inverter.

3. Insert USB in Laptop. format **USB** once before insert in laptop.

4. Copy **Firmware folder** from laptop to SD card.

5. Go to the Enter settings and Press down key to go System Update option.

6. Use password 0715 and update the firmware. Successful indication comes after firmware update process complete.

7. Set Time, date and Country code.
 After this Please Restart the Inverter **(off the DC Supply to turn off inverter, keep inverter in OFF condition for 5 Minutes, After 5 Minutes Just Switch ON DC supply).**

8. Switch ON AC supply and check Inverter will work in Normal Mode.