

SUB-E CARD

SV-iP5A series



- Read this manual carefully before using the SUB-E Card and follow the instructions exactly.
 - After reading this manual, keep it at handy for future reference.

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This product specification may be changed without any prior notice for the purpose of improving its quality, so please make an inquiry by telephone when purchasing the product.

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Before using the product

Thank you for purchasing LS SUB-E CARD.
 This user manual describes handling and precaution for using SUB-E CARD. As wrong handling could result in the product damage and reduction in product life, before using the product, handle it correctly after thoroughly reading this user manual.

Caution

- Do not connect or disconnect SUB-E CARD while the power is on. There is a possibility that both SUB-E CARD and the main frame of inverter might be damaged. (Connect or disconnect it after the capacitor voltage is discharged completely.)
- As there is a possibility of damage in CMOS devices of SUB-E CARD due to ESD (Electrostatic Discharge), be careful in handling.
- Do not connect differently the current output terminal while the power is on.
- Be careful that the main frame of inverter and SUB-E CARD connector is connected coincidentally.
- Handle the inverter as an industrial waste when disposing of it.
- This product can be used with general functions for SV-iP5A .

1) Specifications

- Serial D/A MAX518 (8Bit, 2Ch, 5V)
- Insulation Type (Photocoupler Insulation)
- Channel : Current Output 2Ch
- 0(4) - 20mA Output
- Allowable Impedance : 250 - 500(Ω)
- Level of precision : less than 0.5% (Full Scale)

2) Terminals

CO1	CO2	GND	GND
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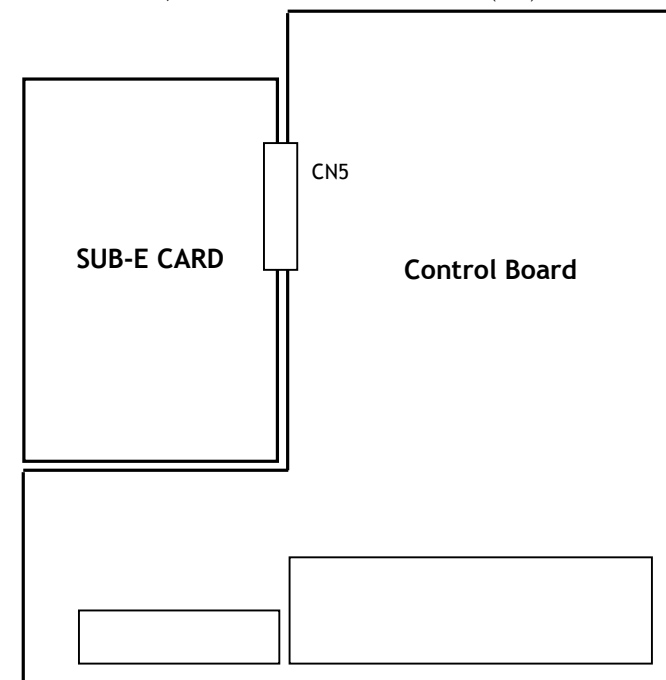
Classif-ication	Terminal Symbol	Terminal Name	Terminal Description
Current Output	CO1	Current Output Ch 1	Select one of output frequency, output current, output voltage, DC link voltage and external PID output, and output it. Output frequency is set to factory default.
		Current Output Ch 2	Select one of output frequency, output current, output voltage, DC link voltage and external PID output, and output it. Output frequency is set to factory default.
	GND	Common Terminal	Common terminals of current output Ch1, Ch2.

3) Use Parameter

CODE	Function Name	LCD Display	Min/Max Range	Factory defaults	Adj. During run
EXT-01	SUB board type	Sub-E	Sub-E	-	-
EXT-40	CO1 Terminal selection	AM1 Mode	0 (Frequency) 1 (Current) 2 (Voltage) 3 (DC link Vtg) 4 (EXT. PID Out)	0	0
EXT-41	CO1 Gain adjustment	AM1 Adjust	10 - 200 [%]	100[%]	0
EXT-42	CO1 Offset adjustment	AM1 Offset	0 - 100 [%]	0 [%]	0
EXT-43	CO2 Terminal selection	AM2 Mode	0 (Frequency) 1 (Current) 2 (Voltage) 3 (DC link Vtg) 4 (EXT. PID Out)	3	0
EXT-44	CO1 Gain adjustment	AM2 Adjust	10 - 200 [%]	100 [%]	0
EXT-45	CO2 Offset adjustment	AM2 Offset	0 - 100 [%]	0 [%]	0

4) Installation

As the below, connect a connector of control board(CN5) To SUB-E CARD.

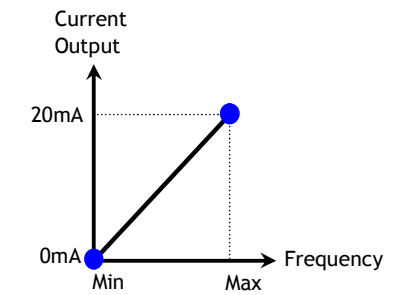


5) Example for Current Output "adjust and offset" (When set to output frequency)

When current output is valid, set "Offset" first and "Adjust".

a) When setting current output for 0 - 20mA

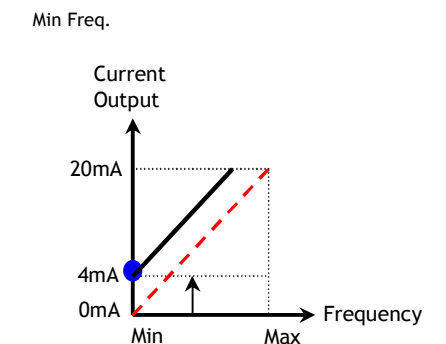
Adjust "Offset" first in order to 0mA output from Min frequency and confirm 4mA output. And then set Max frequency once more and adjust "adjust" in order to 20mA output.



b) When setting current output for 4 - 20mA

Adjust "Offset" first in order to 4mA output from Min frequency and confirm 4mA output. And then set Max frequency once more and adjust "adjust" in order to 20mA output.

(Step 1) Adjust "Offset"(approximately 20%) in order to 4mA output from



(Step 2) Set Max freq. and adjust "adjust"(approximately 80%) in order to 20mA output.

