



This installation guide provides simple function information of PLC control. Please read carefully this data sheet and manuals before using products. Especially read safety precautions and handle the products properly.

1 Safety Precautions

Meaning of warning and caution inscription

	WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury
	CAUTION	CAUTION indicates a potentially hazardous situation which, if no avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices

WARNING	
①	Do not contact the terminals while the power is applied.
②	Protect the product from being gone into by foreign metallic matter.
③	Do not manipulate the battery(charge, disassemble, hitting, short, soldering).
CAUTION	
①	Be sure to check the rated voltage and terminal arrangement before wiring.
②	When wiring, tighten the screw of terminal block with the specified torque range.
③	Do not install the flammable things on surroundings.
④	Do not use the PLC in the environment of direct vibration.
⑤	Except expert service staff, do not disassemble or fix or modify the product.
⑥	Use the PLC in an environment that meets the general specifications contained in this datasheet.
⑦	Be sure that external load does not exceed the rating of output module.
⑧	When disposing of PLC and battery, treat it as industrial waste.

2 Use of Environment

To install, observe the below conditions.

No	Item	Specification	Standard			
1	Ambient temp.	0 ~ 55°C	-			
2	Storage temp.	-25 ~ 70°C	-			
3	Ambient humidity	5 ~ 95%RH, non-condensing	-			
4	Storage humidity	5 ~ 95%RH, non-condensing	-			
5	Vibration Resistance	Occasional vibration		10 times in each direction for X, Y, Z	IEC 61131-2	
		Frequency	Acceleration			Amplitude
		5≤f<8.4Hz	-			3.5mm
		8.4≤f≤150Hz	9.8m/s ² (1g)			-
		Continuous vibration				
		Frequency	Acceleration			Amplitude
5≤f<8.4Hz	-	1.75mm				
8.4≤f≤150Hz	4.9m/s ² (0.5g)	-				

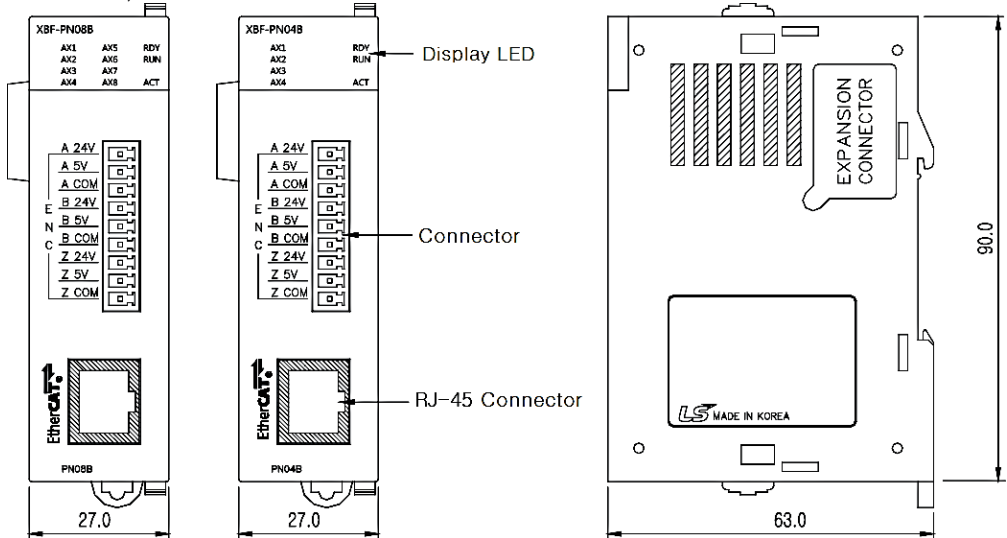
3 Applicable Version

For system configuration, the following version is necessary.

- XBC-U : V1.21 or above
- XEC-U : V1.21 or above
- XG5000 Software : V4.04 or above

4 Parts Name and Dimension (mm)

This is front part of the Module. Refer to each name when driving the system. For more information, refer to user manual.

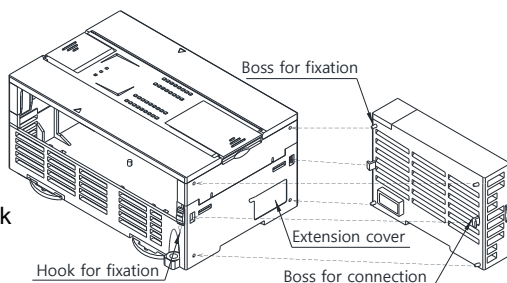


5 Mounting & Installation

Here describes the method to attach each product each product.

1) Attachment of product

- Eliminate the extension cover at the product.
- Push the product and connect it in agreement with hook for fixation of four edges and hook for connection at the bottom.
- After connection, push down the hook for fixation and fix it completely.



2) Detachment of product

- Push up the hook for disconnection, and then detach the product with two hands. (Do not detach the product by force)

6 Wiring

Installation of cable

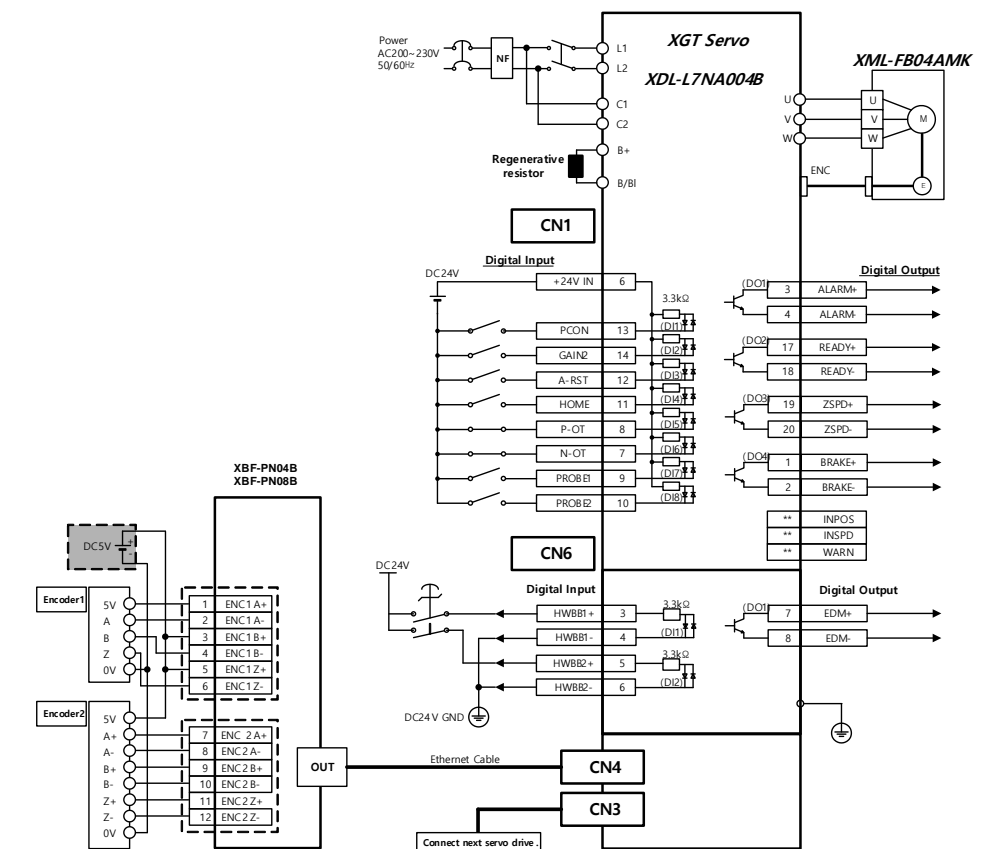
- For alternating current and external I/O signal of positioning module, it is required to use the separate cables to avoid the surge or induction noise generated from the alternating current.
- The length of connecting cable between positioning module and drive machine shall be up to 100m.
- The wires should be selected considering surrounding temperature, allowable current and it is recommended to be more than max. size AWG22(0.3mm²).
- In wiring, if it is too close to the high temperature machine or material or it is directly contacted to the oil for a long time, the short-circuit will occur that may cause the damage or malfunction.
- Make sure to check the polarity before applying the external contact signal to the terminal board.
- In case of wiring the high voltage cable and power cables together, the induction noise occurs that may cause the malfunction or failure.
- In case of wiring by the pipe, the grounding of pipe is required.
- For the communication cable between the positioning module and the driver, use STP CAT-5 or above for connection
- When the communication error occurs during operation of positioning module, which may be caused by noise interference in wiring between the positioning module and the driver. At this time, attach Ferrite Core to the communication cable to prevent the noise

Encoder wiring examples

Pin arrangement	Pin No.	Signal name	Signal direction
1 - A 24V	1	ENC1A+	Input
2 - A 5V	2	ENC1A-	
3 - A COM	3	ENC1B+	
4 - B 24V	4	ENC1B-	
5 - B 5V	5	ENC1Z+	
6 - B COM	6	ENC1Z-	
7 - Z 24V	7	ENC2A+	
8 - Z 5V	8	ENC2A-	
9 - Z COM	9	ENC2B+	

※ If you want to use as a function of the external command signal, Encoder A,B,Z is used as the input signal A,B,Z.

XGT Servo Drive wiring examples



7 Warranty

Warranty period

18 months after the production date.

Scope of Warranty

18-month warranty is available except:

- The troubles caused by improper condition, environment or treatment except the instructions of LS ELECTRIC.
- The troubles caused by external devices
- The troubles caused by remodeling or repairing based on the user's own discretion.
- The troubles caused by improper usage of the product
- The troubles caused by the reason which exceeded the expectation from science and technology level when LS ELECTRIC manufactured the product
- The troubles caused by natural disaster

Change in specifications

Product specifications are subject to change without notice due to continuous product development and improvement.

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