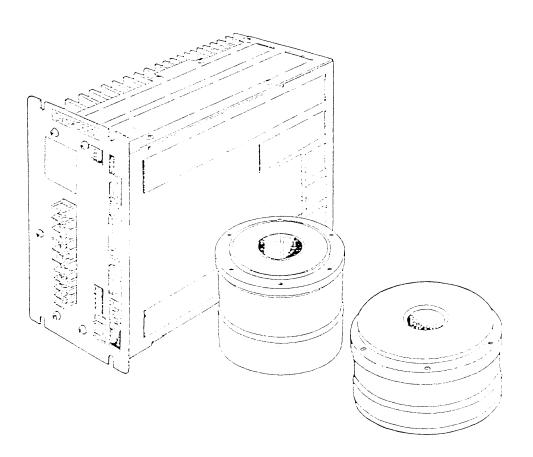


M Type (Built-in Controller) Driver

(Programming Moves & Specific Features)



Introduction

Thank you for purchasing the Direct Drive servo actuator M type driver series.

High torque output and high accuracy are the chief characteristics of the DYNASERV which is an external rotor type of servo actuator. The Dynaserv is used widely in the Semiconductor industry but it also finds numerous applications in the various Factory Automation areas and more.

IMPORTANT: KINDLY READ THE FOLLOWING CAREFULLY BEFORE COMMENCING OPERATIONS.

Cautionary notes concerning this Instruction Manual

This manual contains the instructions for the proper installation, operation and usage for the Direct Drive servo actuator M-type driver series. You must read the following carefully and comply with the same before proceeding with the installation and the subsequent operation of the equipment.

- 1. This manual must be handed over to the final user of the equipment.
- 2. Read the instructions listed in this manual very carefully and after understanding them proceed with the operations.
- 3. Operating the equipment without following the guidelines listed here may lead to irreparable damage to the equipment. It is not possible to guarantee the safety of operations if the instructions are not adhered to.
- 4. It is recommended that the user store this manual carefully in an easily accessible location for quick reference.
- 5. This instruction manual serves as a guide to proper operation of the equipment. It is not to be taken as a guarantee.
- 6. Copying the whole of this manual or even a part of it by any means is strictly prohibited.
- 7. The manufacturer reserves the right to change the contents of this manual at it's discretion.
- 8. While all efforts have been made to ensure accuracy in the contents of this manual, it is possible that errors may have crept in inadvertently. If you find any such discrepancies in the contents, kindly send your comments or suggestions to the manufacturer or it's authorized distributor.

About using this manual:

In order to simplify the reading of this manual, the various features and explanations have been appropriately split into two different parts:

1. Instruction Manual -1 (Installation & Operations Manual)

In this part, the various detailed instructions for handling, installation and connections are explained. The contents index feature the various sub-indices for more details. If this proves insufficient, refer to the section 3.1 Operations Procedure Flow chart, which is a systematic representation of various operating steps.

2. Instruction Manual -2 (Programming Moves & Specific Features)

The part 2 of the instruction manual lists the various programming methods and commands to enable the actuation. The features of each type of motion, the various control settings and the methods of operation are all listed here. For the convenience of our customers, at the end of each subsection explaining a specific feature, simple examples of the programming commands are also detailed, which can be used to actually command motion from the actuation system.

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Refer to the Instruction Manual -1 (Installation & Operations Manual) for the above mentioned contents.

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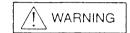
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For The Safe Usage Of This Product

- For the safe use of this product, the symbol and WARNING are used on the product concerned and in this manual. Either symbol on the product indicates that the operator must refer to the warnings and instructions in the manual to avoid injury or loss of life. Be sure to follow the warnings. Handling the product in a manner contradictory to the warnings may result in injury or loss of life.
- Completely understand the following instructions before reading the manual.
- This sheet and the manual must be kept of hand while the product is being used and must be passed on to those personnel using the products.



KEEP AWAY FROM ROTATING PARTS!

■ The motor rotor rotates at high speed. When coupling a load with it, do NOT allow personnel or objects to come within the sphere of its rotation.

ELECTRICAL SHOCK WARNING!

- To avoid electrical shock, ensure that you ground the product.
- Before connecting cables and wires to the driver, make sure that you turn the power off and unplug the power cord.
- When detaching the driver cord for maintenance or the like, make sure that you turn the power off and unplug the power cord.

FIRE AND ELECTRICAL SHOCK WARNING!

- If you notice any abnormal sound, strange odor or smoke emanating from the product, immediately turn off the power and unplug the power cord. Then contact the nearest service representative.
- If you drop the product or it receives a mechanical shock, immediately stop using it and turn off the power. Then contact the nearest service representative.
- Do not use the power supply with a voltage exceeding the range specified for the product.
- Be careful not to let any foreign material such as metal particles, flammable liquids, or moisture enter into the openings on the product (e.g., the gaps around the rotating parts or the vents of the driver). Should this happen, immediately turn off the power and then contact the nearest sales representative.
- Do not bend, twist, squeeze, or pull the cables from the motor with excessive force or subject them to heat or heavy weights.
- Users are strictly prohibited from making any modifications or repair to the product.

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