

DYNAMIXEL MX-64R

**Cautions

- MX-64R supports RS-485 communication.
- Recommended voltage of MX-64 is different with that of former RX-64.
(Operating Voltage : 10~ 14.8V (Recommended Voltage 12V))

** DESCRIPTION

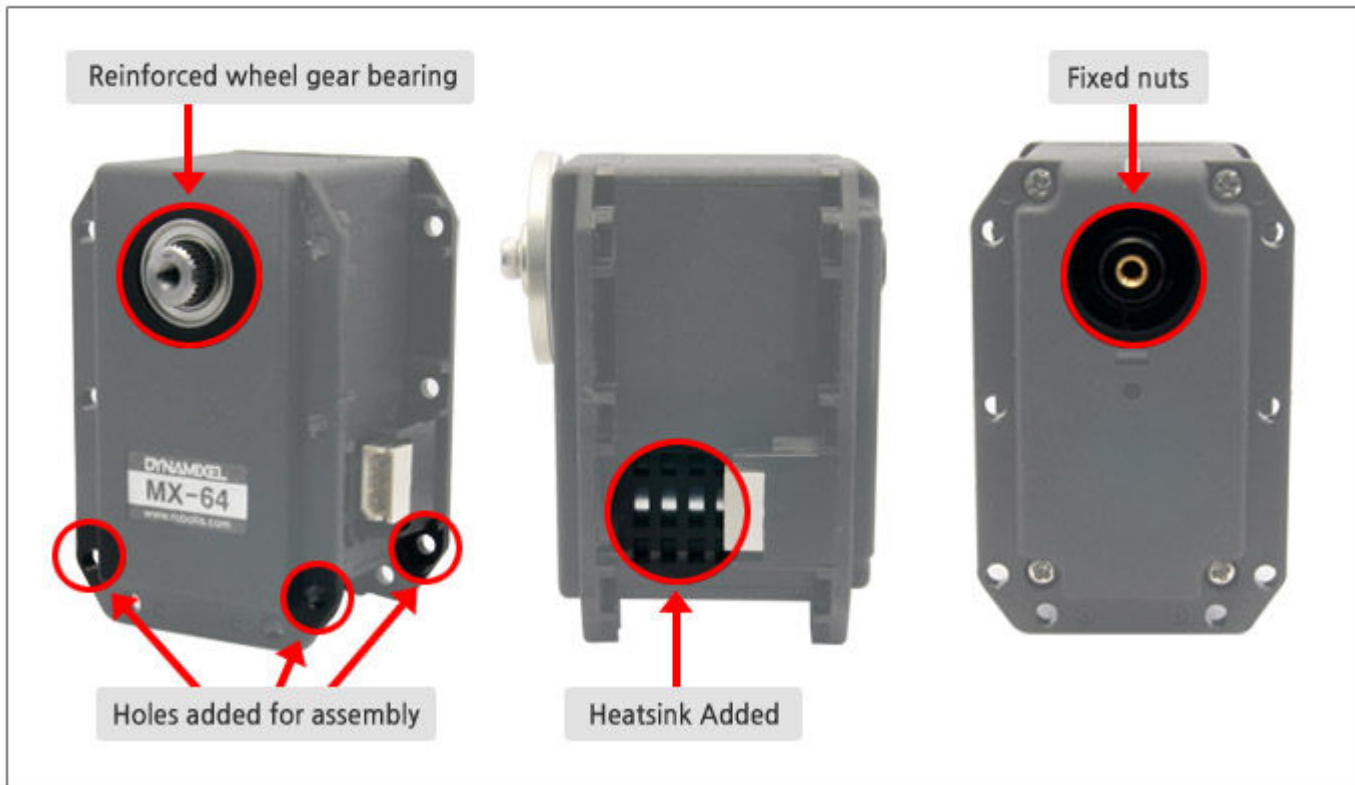
- DYNAMIXEL is a robot exclusive smart actuator with fully integrated DC Motor + Reduction Gearhead + Controller + Driver + Network in one DC servo module.
- MX series is a new concept of DYNAMIXEL with advanced functions like precise control, PID control, 360 degree of position control and high speed communication.

** CHARACTERISTIC

- Advanced durability, degree of precision, and wider control zone were achieved thanks to newly applied CONTACTLESS ABSOLUTE ENCODER
- 360jÆ POSITION CONTROL without dead zone
- 4,096 PRECISE RESOLUTION by 0.088jÆ
- SPEED CONTROL at ENDLESS TURN MODE
- Reliability and accuracy were advanced in the position control through PID CONTROL
- High baud rate up to 3Mbps
- RS-485 LEVEL COMMUNICATION
- Torque control via current sensing

The assembly structure of the MX-64 and RX-64 are the same but there some modifications to the case.

MX-64 External Improvements



** INCLUDES

Description		Qty
DYNAMIXEL	MX-64R	1
HORN	HN05-N101 (MX Exclusive)	1
WASHER	Thrust Washer	1
CABLE	4P Cable 200mm	1
BOLT/NUT	Wrench Bolt M2.5*4	16pcs
	Wrench Bolt M3*8	1pcs
	Nut M2.5	18pcs

**** H/W SPECS**

Product Name	MX-64R		
Weight	126g		
Dimension	40.2mm x 61.1mm x 41mm		
Gear Ratio	200 : 1		
Operation Voltage (V)	10	12	14.8
Stall Torque (N.m)	5.5	6	7.3
Stall Current (A)	3.9	4.1	5.2
No Load Speed (RPM)	58	63	78
Motor	Maxon Motor		
Minimum Control Angle	About 0.088° x 4,096		
Operating Range	Actuator Mode : 360° Wheel Mode : Endless turn		
Operating Voltage	10~14.8V (Recommended voltage : 12V)		
Operating Temperature	-5°C ~ 80°C		
Command Signal	Digital Packet		
Protocol	Half duplex Asynchronous Serial Communication (8bit, 1stop, No Parity)		
Link (physical)	RS-485 Multi Drop Bus (daisy chain type connector)		
ID	254 ID (0~253)		
Baud Rate	8000bps ~ 3Mbps		
Feedback Functions	Position, Temperature, Load, Input Voltage, Current , etc.		
Material	Case : Engineering Plastic Gear : Full Metal		
Position Sensor	Contactless absolute encoder		
Default	ID #1 – 57600bps		

** After purchase, please change ID and baud rate according to your use.

**** COMPATIBLE PRODUCTS**

- Controller : CM-2+, CM-700
- Interface(I/F) : USB2Dynamixel (RS-485)

- NOTICE : Not compatible with the RX-64 horn. (HN05-N101 Set / T101 Set)

**** CONTROLLING ENVIRONMENT**

- Software for Dynamixel control : ROBOPLUS - [Download](#)

- C/C++, C#, Labview, MATLAB, Visual Basic et. : Library - [Download](#)

[Click here to download 2D and 3D drawings](#)**

[Click here to go to e-Manual.](#)**