

ExROS -- Excitron Robot Operating System

integrated with precision stepper motors produce the world's most compact and powerful CNC Robot control. Uses popular and simple gcode files.

Save time and money—you **never** need to write any software or design electronics for robotics, CNC (Computer Numerical Control), motion control, automation, motorized products, and machines. ExROS mimics human motion, and is adaptable, configurable and flexible. You can use CNC gcode, even with a single motor, to run a sequence with thousands of coordinated motions.

Gives you an *enormous* reduction of size, weight, wires, complexity, and energy.

Simple easy single letter command set:

- **d** directory of all stored files.
- **G** executes the gcode file in SRAM line by line.
- **g** executes the SRAM gcode file but does not run the motors, great for checking your gcode.
- **l** load any gcode flash file to SRAM.
- **r** read external gcode file to SRAM.
- **S** save your SRAM gcode file to flash.
- **v** view SRAM Gcode file.
- **x** to display position, and many other commands.
- Integrated with Motion Profile Mode for input pins/modes, time delays, homing, auto-startup, etc.

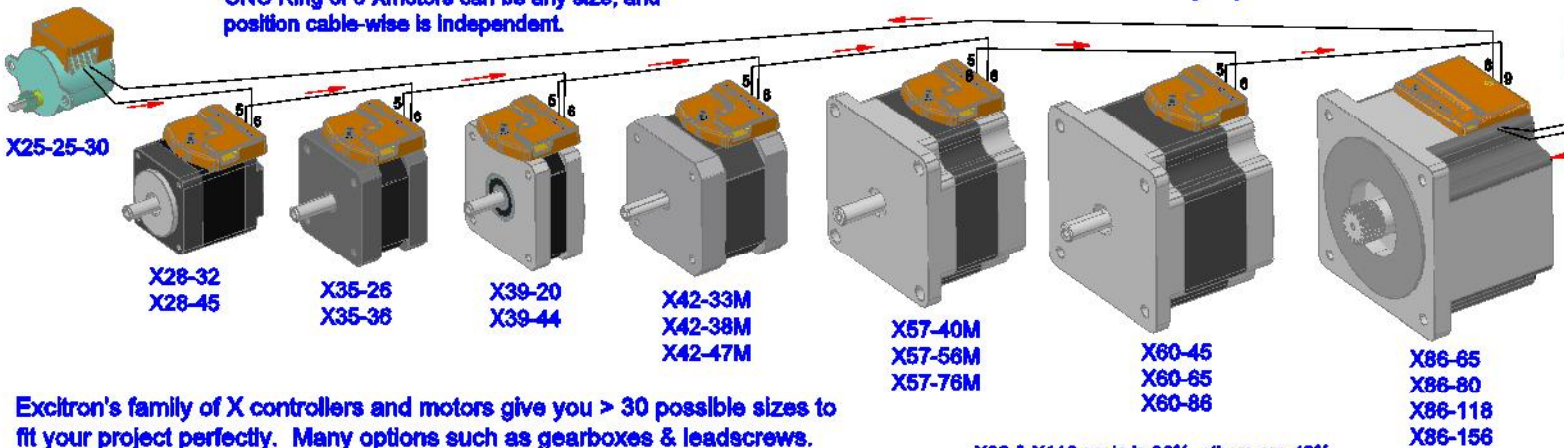
Built-in Joystick on each motor gives you Instant motor running of 4 sets of 3 Motion Profiles. Run CW or CCW, change speed on-the-fly, save your new speed, and stop—all without any PC or external switches. Great for jogging and precise repetitive movements. You can set the exact motion you need since the Joystick motion is configurable.

Quad Storage Scope —4 analog-to-digital channels on each motor. Full control of data Input with channel select, gain from .5 to 64X, number of samples, offset, and time interval. The high speed 12 bit analog-to-digital measurements are sent by serial port for your analysis and evaluation.

ExROS works with motors as small as 4mm



CNC Ring of 8 Xmotors can be any size, and position cable-wise is independent.



Excitron's family of X controllers and motors give you > 30 possible sizes to fit your project perfectly. Many options such as gearboxes & leadscrews.

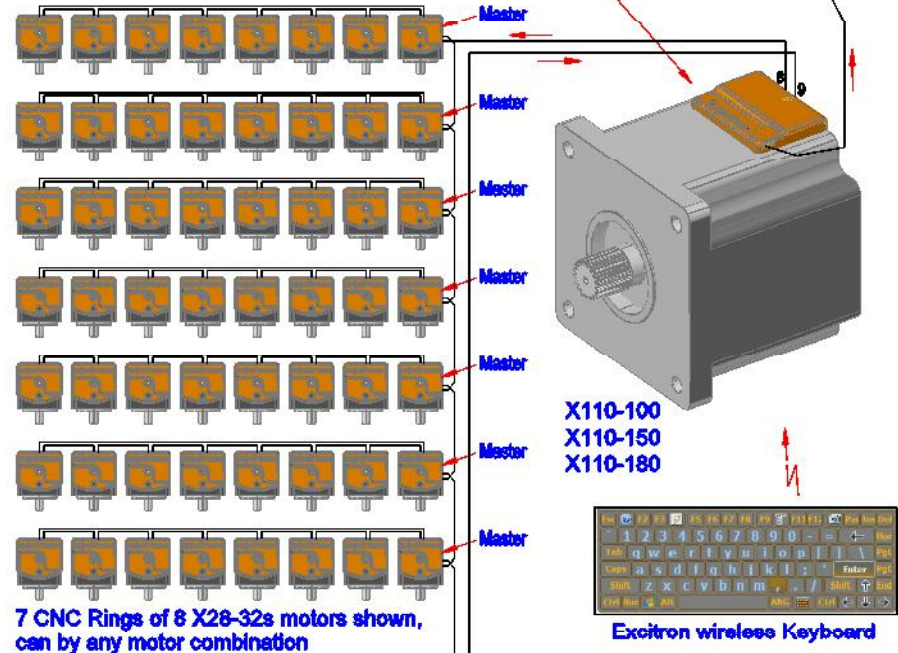
X86 & X110 scale is 30%, others are 40%

Up to 65 motors with coordinated motion!

Your robot or machine can have up to:

- 270 12-bit analog-digital or digital channels
- 270 Oscilloscope storage analog-digital channels
- 65 power supply voltage measurements
- 65 Joysticks for motion control
- 56 available 3.3v serial ports
- 65 temperature sensors
- 200,000 Gcode lines

God sends Gcode filenames to 8 Masters
Serial connection to any monitor display



Master stores Gcode files for 8 Slaves, views, loads, and executes by sending commands to slave Axis' via simple single wire.

EXCITRON
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 ExROS System Configuration