# Positioner Controller, simultaneous

#### AL-4162

The AL-4162 programmable positioner controller offers real-time control of positioning subsystems used in near-field and far-field antenna measurement systems. Typically, it may be configured to drive planar scanners and general purpose far-field positioners that are encoder-based or involve simultaneous motion.



# Series Overview

| Model          | AL-4162   | AL-4164   | AL-4166   |
|----------------|-----------|-----------|-----------|
| Horsepower     | Up to 1/3 | Up to 3/4 | Up to 1.5 |
| Number of Axes | 2         | 4         | 4         |

# Applications

- Near-Field & Far-Field Antenna Measurements
- Encoder-Based Positioners & Scanners
- Light & Medium Duty Positioning Subsystems

# Product Highlights

- Simultaneous Control Up to 2 Axes
- Includes 1/3 HP Power Control Unit (PCU)
- 2 Independent PWM Channels
- Incremental Encoder Support
- Brush & Brushless Motor Support
- 8 TTL I/O Lines for Auxiliary Component Control
- Dynamic Density Control (DDC)
- User-Friendly Axis Configuration Software
- Communication to Host PC Supported by RS-232 & CAN Bus

#### **Front Panel**

#### Controls

- AC Power On/Off
- Axis Select
- Direction/Speed
  - Coarse & Fine
- Remote/Local Control (BUS/PANEL)
- Emergency Stop (E-Stop)

#### **Displays & Indicators**

- Axis Position
- Limit Indicators
- Homing Status
- Homing Completed

# **Position Sensors**

#### **Axis-Independent Position Sensor Selection**

Incremental Encoder

#### **Closed Loop Motion Control Algorithms**

- User Selectable PID or PIV Motion Control Filters (Per Axis)
- Dynamic Braking
- Comprehensive Motion Profiles Velocity, Parabolic Ramping, S-Curve & Acceleration/Deceleration
- Single or Dual Feedback Encoders

# **Trigger Functions**

#### Trigger In (Capture Function)

Capture (Latch) Precise Encoder Position from External Trigger:

- Capture Event on Digital Input
- Capture Event on Encoder Index

### Trigger Out

Generated at Exact Compared Values (when actual position equals compared position):

- Trigger Rate Up to 4 kHz
- User Selectable Pulse Polarity
- User Selectable Pulse Width

# **Supplied Accessories**

#### **Digital Documentation Set**

- User Manual (Installation, Setup, Operation)
- Programming Reference Manual
- Software Setup Utility

#### Cables

- Cable, CAN, DB9 to RJ45 (for Setup Utility)
- Cable, RS-232, DB9 to RJ45 (for Setup Utility)
- AC Power Cord, IEC-320 (F) to Plug

#### **Options**

- Opt. 101 Additional Manual Set
- Opt. 102 International Localization (Specify Country & Voltage)
- Standard □ Optional

Note: See AL-4160 series specification table for more information.

