Stepping Drives

Leadshine 2-phase Digital Stepper Drives

Leadshine

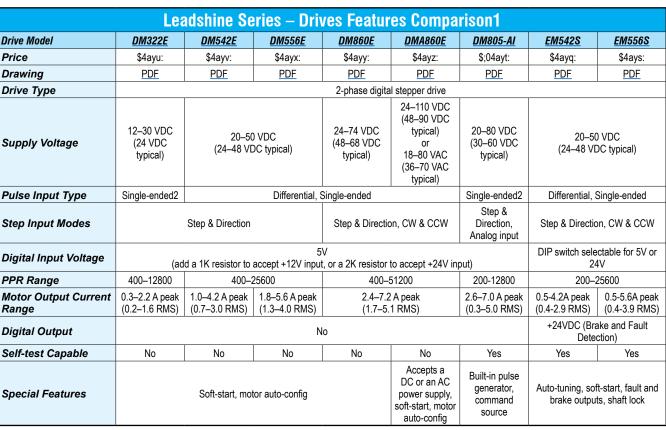
Leadshine has been an industry leading motion control supplier since 1997, and is one of the largest stepper drive manufacturers in the world. Leadshine steppers offer high quality products (Leadshine factories are ISO9001 certified) at very affordable prices. Leadshine steppers are simple, easy to use, long-lasting, and reliable.

AutomationDirect sells a wide range of linear and switching power supplies, stepper motors, cables, and PLCs with hi-speed outputs that are compatible with Leadshine stepper drives.

Features

- 2-phase digital stepper drives
- Anti-resonance for optimal torque, extra smooth motion, low motor heating and noise
- · Motor auto-config on power up
- All drives support step and direction control, some models support CW/CCW as well
- Micro-stepping for smooth motor movement
- DIP switch configurable
- Wide range of input voltages supported (12-110 VDC, 18-80 VAC)

- Pulse input frequency up to 200kHz
- Soft-start with no "jump" when powered on
- Automatic idle-current reduction
- Protections for over-voltage and overcurrent
- NEMA 11, 14, 17, 23, 24, 34 and 42 frame size step motors supported



1 - Refer to Specifications Tables for detailed specifications.

2 - See the User Manual or Quick Start Guide for instructions on wiring Single-Ended drives to a Differential (Line Driver) controller.







1-800-633-0405

For the latest prices, please check AutomationDirect.com.



Stepping Drives



DM542E, DM556E, DM860E, DMA860E

The DM542E and DM556E drives are capable of pulse and direction operation, with auto-motor config on power up.

The DM860E and DMA860E drives possess the same capabilities but can also do CW and CCW pulse operation. The main difference between these models are output current range to the motor and supply voltage.

Leadshine DM542E, DM556E, DM860E, DMA860E Specifications					
Drive Model		<u>DM542E</u>	<u>DM556E</u>	DM860E	<u>DMA860E</u>
Output Current		1.0–4.2 A peak (0.7–3.0 RMS)	1.8–5.6 A peak (1.3–4.0 RMS)	2.4–7.2 A peak (1.7–5.1 RMS)	2.4–7.2 A peak (1.7–5.1 RMS)
Input Voltage		20–50 VDC (24–48 VDC typical)		24–74 VDC (48–68 VDC typical)	24–110 VDC (48–90 VDC typical) or 18–80 VAC (36–70 VAC typical)
Logic Signal Current		7–16 mA (10mA typical)			
Pulse Input Frequency		0–200 kHz			
Minimal Pulse Width		2.5 µs			
Minimal Direction Setup		5.0 µs			
Isolation Resistance		500mΩ			
Connector P1 Functions	PUL+	Pulse signal: 5V signal, differential input. High input is 4-5V, Low input is 0-0.5 V. Minimum pulse width = 2.5 µs. Add a 1k			
	PUL-	resistor for +12V signals, 2k⊡ for +24V signals.			
	DIR+	Direction signal: 5V signal, differential input. High input is 4-5V, Low input is 0-0.5 V. Minimum pulse width = 2.5 µs. Add a 1k			
	DIR-	resistor for +12V signals, 2k⊡ for +24V signals. Direction Function∶ requires 5µs setup time. CW/CCW Function (DM860E and DMA860E only)∶ see DIP switch SW14.			
	ENA+	Enable signal: 5V signal, differential input. High input is 4-5V, Low input is 0-0.5 V. Minimum pulse width = 2.5 µs. Add a 1k resistor for +12V signals, 2kl for +24V signals. Enable Function: Close (pull low) to disable the drive.			
	ENA-				
Replacement Connectors		Power = DN-6PLUG, I/O = DN-4PLUG, Enable = DN-2PLUG			
Cooling		Natural cooling or forced cooling			
Ambient Temperature		0°C to 65°C (32°F to 149°F)			
Humidity		40–90% relative humidity			
Operating Temperature		0°C to 50°C (32°F to 122°F)			
Vibration		10–50 Hz / 0.15 mm			
Storage Temperature		-20°C to 65°C (-4°F to 149°F)			
Self Test		No			
Weight		227g (8 oz)	300g (10.6 oz)	510g (1.13 lbs)	510g (1.13 lbs)