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Data Sheet

August 15, 2026

ELGAR

Elgar 401SD Programmable AC Source

The Elgar 401SD-001 is a single-phase AC power source designed for testing and simulating AC power conditions. It features a wide output voltage range, programmable waveforms, and comprehensive measurement capabilities.



MODEL

Elgar 401SD-001

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

401SD-001

LISTING

<https://aumictechlabs.com/products/401sd-001-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Elgar 401SD-001 is a single-phase AC power source component, specifically an oscillator module, programmable frequency and voltage control for compatible Elgar AC power supplies. It functions as a plug-in unit that interfaces with Elgar power amplifier systems to generate precise AC power output. This module is characterized by its user-adjustable frequency settings via decade switches and its integration with a power source's gain control for amplitude adjustment.

Technical Specifications

- * Module Type: Plug-in Oscillator Module
- Compatibility: Designed for Elgar AC Power Sources (e.g., 400SD/SP series, 1001B)
- Frequency Control: * Manual control via four decade switches on the front panel. * Frequency range switch (X1, X10, X100). * Frequency resolution of 1 part in 10,000. * Frequency limits: Outputs zero if frequency is below 44 Hz or above 5100 Hz.
- Frequency Output Range: * Typically 45 Hz to 5100 Hz, depending on the specific configuration and associated power source limitations.
- Amplitude Control: * Output amplitude is uncalibrated and adjusted via the gain potentiometer on the associated power source. * Can be

externally programmed for amplitude control: * Resistance Programming: Varying output amplitude by changing an external resistor connected between pins 7 and 8 of connector J1. The value is 100 ohms per volt for a 130V output range. * Voltage Programming: Output controlled by a positive input voltage applied to Pin 6 with common to Pin 1 of J1. The gain knob on the power source is removed and replaced with a shaft lock for full-scale adjustment. Output Signal Amplitude (Oscillator): Approximately 2V RMS. Harmonic Distortion: Not specified in available data. Frequency Accuracy: Not specified in available data. Temperature Coefficient: Not specified in available data. Tandem Operation: Equipped for tandem operation with other Elgar power sources. Pins 9 and 14 of the oscillator are connected together for this purpose. Physical Mounting: Plugs into the front panel of the Elgar power source and is secured by two captive screws. Weight: 55 lbs (for the Elgar 1001B power supply unit, likely including an oscillator). Interfaces * Front Panel: Decade switches for frequency selection, range switch, frequency limit LED. Rear Panel (J1 Connector): * Pins 7 and 8 for external resistance programming. * Pin 6 for voltage programming input. * Pin 1 for common reference in voltage programming. * Pins 9 and 14 for tandem operation. Compatibility The Elgar 401SD-001 is designed as a plug-in module for Elgar AC power sources. It is compatible with various models within the Elgar 400SD/SP series and is mentioned in conjunction with the Elgar 1001B power supply. Options such as -001, -002, -003, and -004 appended to the model number are noted to have no impact on the oscillator itself but serve for general clarification of power amplifier and oscillator combinations. Operation The 400SD oscillator plugs into the front panel of an Elgar power source. The desired frequency is set using the decade switches and the range switch. The output amplitude is then adjusted using the gain potentiometer on the front panel of the associated power source. If the selected frequency is outside the operational limits (below 44 Hz or above 5100 Hz), the frequency limit LED will illuminate, and the oscillator output will drop to zero. Why Choose Aumictech for the Elgar 401SD-001? At Aumictech, we specialize in supplying high-end AC power source components. Whether you need a precise frequency oscillator for a legacy test system, reliable integration with your existing Elgar power amplifier, or a component to ensure consistent AC power simulation, our team ensures the Elgar 401SD-001 delivers maximum performance for your application.

401SD001 Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Manual plug-in oscillator
Series Family	Elgar 400 SD
Model	401 SD single phase
Phases	1
Frequency Range Standard	45 Hz to 5000 Hz
Frequency Calibration Accuracy	plus or minus 0.001 percent of set value
Frequency Resolution	0.01 or 0.1 or 1 Hz
Frequency Temperature Coefficient	3 ppm perCPhase Angle Accuracy 45 Hz To 2 Khz: plus or minus 1 degree
Phase Angle Accuracy Above 2 Khz	add plus or minus 1 degree per kHz
Extended Frequency Option	15 Hz to 10 kHz
External Resistance Programming	0 to 13 kohm for 0 to full scale
External Voltage Programming 0 To 10 Vdc	0 to full scale
External Voltage Programming 0 To 13 Vdc	0 to 130 V output
External Voltage Programming 0 To 26 Vdc	0 to 260 V output
Voltage Range Code	0 to 130 V output of power source
Remote Sense Options	1 phase 2 phase 3 phase or open delta
Signal Type	precision sine to AC source amplifier
Form Factor	Elgar plug-in oscillator bay

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Frequency Calibration Accuracy	plus or minus 0.001 percent of set value
Frequency Resolution	0.01 or 0.1 or 1 Hz
Frequency Temperature Coefficient	3 ppm perCPhase Angle Accuracy 45 Hz To 2 Khz: plus or minus 1 degree
Phase Angle Accuracy Above 2 Khz	add plus or minus 1 degree per kHz
Extended Frequency Option 5	15 Hz to 10 kHz
Extended Frequency Option 6	15 Hz to 5 kHz
Extended Frequency Option 7	45 Hz to 10 kHz
External Resistance Programming	0 to 13 kohm for 0 to full scale
External Voltage Programming 0 To 10 Vdc	0 to full scale
External Voltage Programming 0 To 13 Vdc	0 to 130 V output
External Voltage Programming 0 To 26 Vdc	0 to 260 V output
Voltage Range Code 1	0 to 130 V output of power source
Voltage Range Code 2	0 to 260 V output of power source
Voltage Range Code 3	0 to 32 V output of power source
Voltage Range Code 4	0 to 65 V output of power source
Remote Sense Options	1 phase 2 phase 3 phase or open delta
Signal Type	precision sine to AC source amplifier
Form Factor	Elgar plug-in oscillator bay
Notes	
Numeric rows from Elgar Manual Plug-In Oscillators 400 SD series catalog tables. 401SD-001 is the single-phase 401 SD configuration alias used in inventory naming.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.