

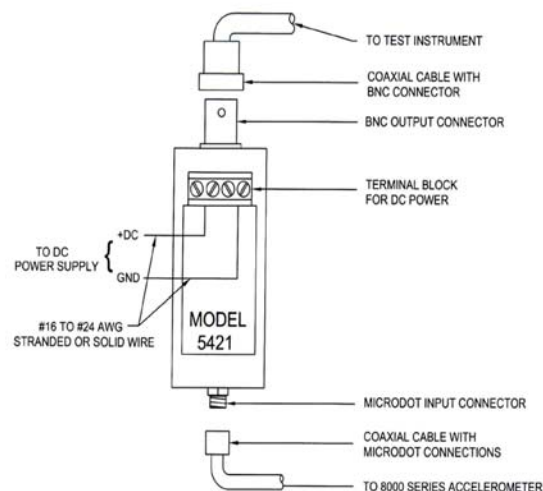
FEATURES

- **Compact Single-Channel Unit**
- **Convenient DC Operation**
- **Lightweight and Portable**
- **Low Cost**

The Columbia Model 5421 Single-Channel Power Supply provides a convenient unity gain interface between any Columbia 8000 or 900 Series Integrated Piezoelectric Accelerometer and a variety of display or analyzing type instruments. This supply provides a 4.0 mA DC constant current to the pre-amplification circuitry within the transducer thus eliminating the need for a complex and costly charge amplifier. This current source will permit the use of any length output cable up to 500 feet long.

The Model 5421 requires a user-supplied source of DC voltage between +12 and +32 volts. The minimum voltage should be chosen to be at least six volts greater than the specific output bias level of the selected transducer.

The BNC output jack provides a convenient interface for oscilloscopes, spectrum analyzers or other signal analyzing instruments. It may be directly connected to the BNC input of an oscilloscope or other instrument by the use of a UG-491 BNC plug-to-plug adapter.



BASIC WIRING DIAGRAM

Specifications

No. of Channels	One
Power Required ¹	+12 To +32 VDC @ 4.0 ±10% mA
Power Connections	Terminal Block accepts #16-#24 AWG Stranded or Solid Wire
Output Current to Transducer	4.0 mA DC ±10%
Output Impedance	250 Ohms
Voltage Gain	0.0 dB (Unity Gain)
Residual Noise (1 Hz To 20KHz)	75 µV RMS Max.

Temperature Range	-40 To +85 Deg C
Maximum Output Voltage (VRMS)	Dependent on bias level of transducer
Output Connector	BNC Coaxial
Transducer Input Connection	10-32 Coaxial Receptacle
Size	2.25" x 1.13" x 0.88"
Weight	54 gm

¹ Minimum voltage required is dependent on transducer.

Available Accessories:

- Miniature Low Noise High Temperature Coaxial Cable Assembly, #10-32 to #10-32, Columbia Type LNHT
- Cable Adapter, #10-32 Female To BNC, Columbia P/N Z300742
- BNC Adapter, Plug-To-Plug (UG-491)