

# Three channel power units

## P703B series



### Key features

- Powers 3 separate sensors
- Battery condition light
- DC decouples the output
- Battery powered (line adaptor optional); uses common 9V batteries
- Can drive up to 50 ft of cable
- Manufactured in an approved ISO 9001 facility

Wilcoxon's P703B series of power supplies can be used with most standard industrial accelerometers requiring an IEPE constant current DC power source. The power supply contains a 18-30 Volt source and current regulating diode to simultaneously power up to three different sensors, or, if using a triaxial accelerometer, all three channels (axes) of a single sensor. Units come with three 9V batteries to provide power, and optional AC supplies are available.

Each module has a standard BNC output connector for easy compatibility with most data collection or analysis equipment, as well as an LED that indicates when the battery level is low. P703B units will provide 1:1 gain from the transducer being powered in addition to a minimum of 60 dB channel separation for clear readings.

P703B models	Description
P703B	standard model
P703B-6	6 mA constant current
P703BT	Bendix 4 pin connector

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

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 An Amphenol Company

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### SPECIFICATIONS

	P703B	P703B-6	P703BT
<b>Input</b>			
Voltage to transducer	27 VDC <sup>1</sup>	27 VDC <sup>1</sup>	27 VDC <sup>1</sup>
Current to transducer	2.4 mA DC, ±20%	6.0 mA DC, ±20%	2.4 mA DC, ±10%
Maximum input voltage	10 V rms	10 V rms	10 V rms
<b>Output impedance (sensor attached to input)</b>			
Output impedance	same as transducer	same as transducer	same as transducer
Recommended load impedance	> 100 kΩ	> 100 kΩ	> 100 kΩ
Decoupling capacitor (internal)	22 μF, 35 VDC	22 μF, 35 VDC	22 μF, 35 VDC
<b>Gain</b>		1:1 with DC decoupling	
<b>Frequency response</b>		same as transducer	
<b>Channels</b>		3	
Channel separation	> 80 dB	> 80 dB	> 60 dB
<b>LED lights</b>		> 18 VDC	
Battery life	> 40 hours	> 16 hours	> 40 hours
<b>Batteries</b>		9V alkaline (3)	
<b>External power</b>		24 to 30 VDC	24 to 30 VDC
<b>Temperature range</b>		0 to +55° C	
<b>Size (width x height x depth)</b>		3 x 2.4 x 4 inches	
Weight	0.84 lb	0.84 lb	1.0 lb
Signal input connector	BNC	BNC	Bendix POC2A-8-4P
Signal output connector	BNC	BNC	BNC (front panel)
<b>Pin out (P703BT only)</b>			A: y axis B: x axis C: z axis D: common/return

### Contact

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### Accessories supplied:

- 9V alkaline batteries (3)

### Accessories available:

NC3 Ni-Cad battery kit;  
LA704B line adaptor (110V);  
LA4B-220 line adaptor (220V); BNC series adaptors

**Notes:** <sup>1</sup> 25.2 VDC when using Ni-Cad batteries

<sup>2</sup> For extended operation, the NC3 Ni-Cad battery kit should be used

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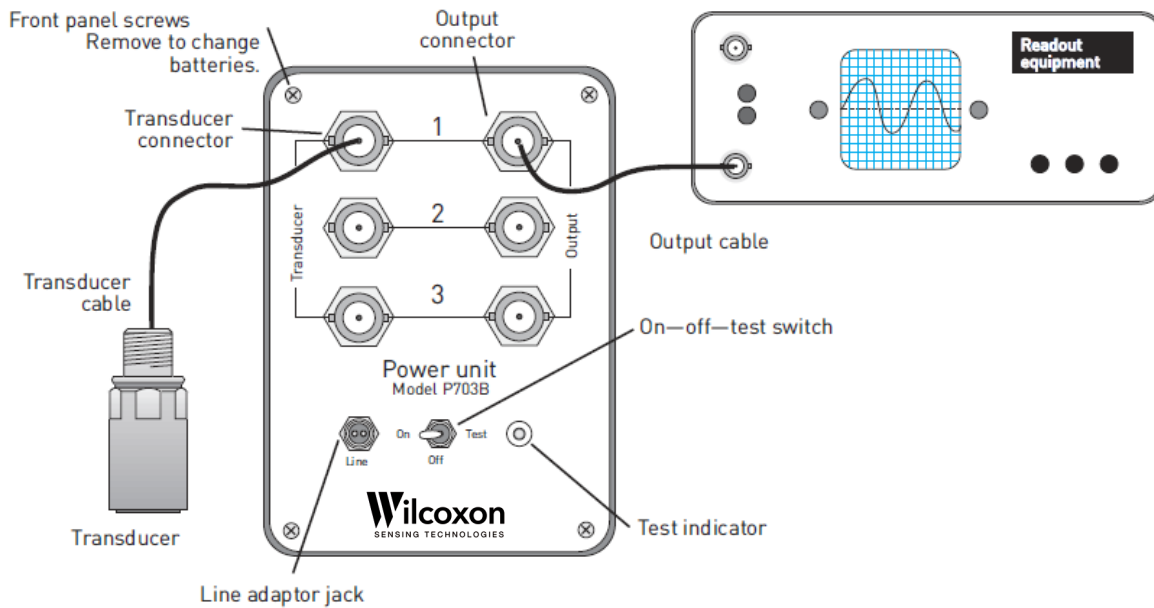
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### Operating instructions



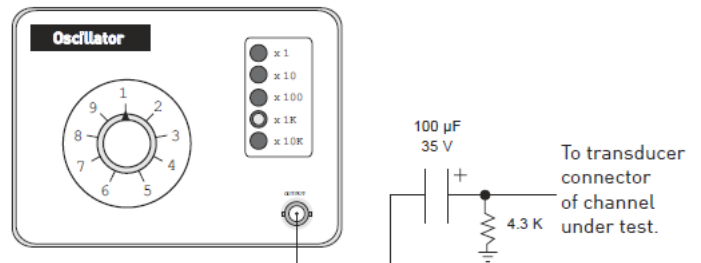
1. To test batteries, press switch to RIGHT (momentary) position; LED should light.
2. OFF position is with switch in center.
3. To turn unit ON, press to LEFT.

Use LA704B line adaptor to power unit from line voltage without batteries installed or to charge Ni-Cad batteries.

**CAUTION: DO NOT ATTEMPT TO RECHARGE ALKALINES WITH THE LA704B. Alkaline batteries may EXPLODE or leak corrosive fluids.**

#### Test for proper operation

- Use a digital multimeter to verify that the proper voltage and current are available at the transducer connector.
- Substitute an oscillator for the transducer.
- Follow the connection to the power unit as shown at right.
- The unit should have unity gain.



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