

OVERVIEW Vibration Controller VT-9002

The ECON VT-9002 vibration controller integrates high-end DSP processors, low noise hardware design technology, advanced vibration control algorithms, and data transmission technology, suitable for vibration control of electric vibration tables and hydraulic vibration tables.

The ECON vibration controller adopts an advanced distributed structure system, with closed-loop control implemented by DSP processors, ensuring real-time and efficient control system performance. The PC is independent of the control loop, ensuring timely and quick response to nonlinearities, resonance points, and dynamic load changes in the test system, ensuring control stability and high accuracy. The control software is based on the Windows operating system, providing users with a very user-friendly operation interface.

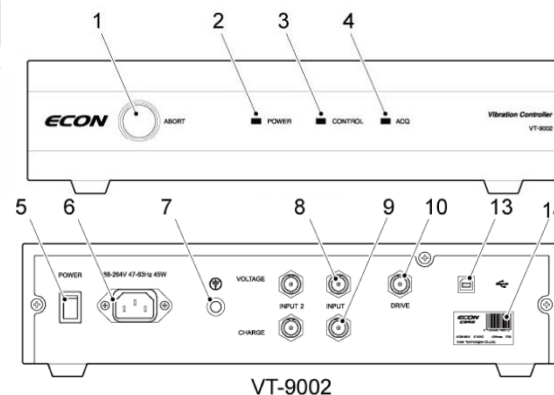
Controller Module

■ Random Test ■ Shock Test ■ Sine Test ■ RSTD Test



SPECIFICATIONS Vibration Controller VT-9002

Model	VT-9002
Input Channels	2 Voltage channel and 2 Charge channel
Drive Output	1
COLA Output	None
Digital I/O	None
Dimensions (W×H×D)	300×79×362 mm
Mass	2.9kg
Power Supply	88V to 264V, 47Hz to 63Hz AC, Auto Sensing
Power Consumption	15W
Temperature	-10 to 50 °C/14 to 122 °F
Humidity	20% to 90% RH non-condensing(40°C)
Regulatory Compliance	CE Marking, According to EN 61326-1:2006, EN 61010-1:2001
PC System	Microsoft Windows XP/7/8/10/11
PC Port	USB 2.0



1. ABORT Button
2. Power LED
3. Control LED
4. ACQ LED
5. Power Switch
6. AC Connector
7. Ground Pole
8. Voltage Input BNC Connectors
9. Charge Input BNC Connectors
10. DRIVE Output
11. COLA Output
12. Abort Port
13. USB Connector
14. Nameplate

TECHNICAL PARAMETERS Vibration Controller VT-9002

Output Connectors	BNC
Voltage Range	±10 VPEAK
Resolution	24-bit DAC
Output Impedance	30 Ω
Output Load	Max.30 mA PEAK
Dynamic Range	100 dB
Filtering	160 dB / Oct digital and analog filters
Amplitude Accuracy	0.1 % (@1 kHz, 1V input)
Frequency Accuracy	0.001 %
	< - 95 dB (@1 kHz, Fifth harmonic)

Input Connectors	BNC
Input Range	± 10 V PEAK
Max. input	± 36 V PEAK
Resolution	24-bit ADC
Input Impedance	220 kΩ
Dynamic Range	120 dB
Anti-aliasing Filter	160dB/Oct digital filter plus analog filter
Coupling	AC, DC, IEPE, charge, TEDS (optional)
IEPE power Supply	+24 V / +4 mA
Amplitude Accuracy	0.5 % ≤10kHz
Frequency Accuracy	0.001 %
Harmonic Distortion	≤100dB (@1 kHz, Fifth harmonic)
Channel Match	Amplitude ±0.05 dB (DC-20 kHz)
	Phase ±0.5 Degree (DC-20 kHz)

SNR	>100 dB (@1 kHz, 1 V input)
Regulatory Compliance	<-105 dB