

The control panel of BST-Vib Vibration Shaker is shown as follows



1. Vibration amplitude output display- Shows the amplitude of the different vibration signal outputs of the Shaker
2. Calibration potentiometer
3. Function selecting switch- Switches the output of the Shaker to acceleration, velocity or displacement
4. Potentiometer for adjusting the output amplitude
5. Adjusting the output vibration amplitude slowly
6. The table for fixing the transducer to be calibrated
7. The thread hole for fixing the stand of proximity probe- During the calibration of proximity probe, the stand of the transducer is fixed on the control panel through this thread hole.
8. Power switch 120 VAC- optional 220 VAC
9. Socket for 120 VAC power input optional 220 VAC Used for connecting 120 V AC power.
10. Socket for power output- For monitoring the wave shape of the output signal of the power amplifier of the Shaker.
11. Output socket for – 24 V voltage- Provides power at – 24 V for proximitor during the calibration of proximity probe.
12. Frequency selecting switch- For selecting the frequency of the output signal

BST-Vib Specifications

Frequency
10, 20, 40, 80, 160, 320, 640, 1280Hz +0.01%
Unit
Acceleration: m/s ² (PEAK) Velocity: mm/s (RMS) Displacement: um (PK-PK)
Amplitude Accuracy
Acceleration (@30m/s ² pk) 40Hz to 320Hz + 0.3dB + 1digit 20Hz to 1280Hz + 0.5dB +1digit Velocity (@25mm/sec pk) 40Hz to 320Hz +0.5dB +1digit Displacement (@10μm pk-pk, 80Hz) 40Hz to 320Hz + 0.5dB + 1digi
Proximity probe linearity
Prode: 5mm and 8mm probes Range: 0~4.0mm
Display
3 1 /2-digit display for acceleration, velocity, or displacement
Physical
Size:280 x 180 x 250(mm) Weight: 20lb
Environmental Temperature
Operation: 0 oC to 50 oC Storage: -20 oC to 70oC
Humidity : 90% non -condensing



Maximum vibration amplitude and maximum load

Because the vibrostand used in BST-Vib Series Vibration Shaker is rather small, during the calibration of transducers of different weight under different frequencies the output amplitude of the Shakers are also different. Maximum vibration amplitude and maximum load are related to the maximum acceleration, maximum velocity and maximum displacement output generated from the Shaker under a certain frequency and with a certain weight of the transducer to be calibrated. The specific figures can be seen in the following table

Wt Freq	$\leq 100\text{g}$			$\leq 250\text{g}$			$\leq 650\text{g}$		
	a(m/S^2)	v(mm/S)	d(μm)	a(m/S^2)	v(mm/S)	d(μm)	a(m/S^2)	v(mm/S)	d(μm)
10Hz	2.5	28	1300	3.5	40	1800	4	45	2000
20Hz	15	85	1900	10	60	1300	5	28	640
40Hz	60	170	2000	35	100	1100	12	35	380
80Hz	100	141	800	40	60	320	14	20	110
160Hz	75	53	150	35	25	70	12	8.5	24
320Hz	50	18	25	30	10	15	10	3.5	5
640Hz	30	5	3	20	3.5	2	6	1	*
1280Hz	23	2	*	10	0.9	*	5	0.4	*

Standard accessories



Outer Case

