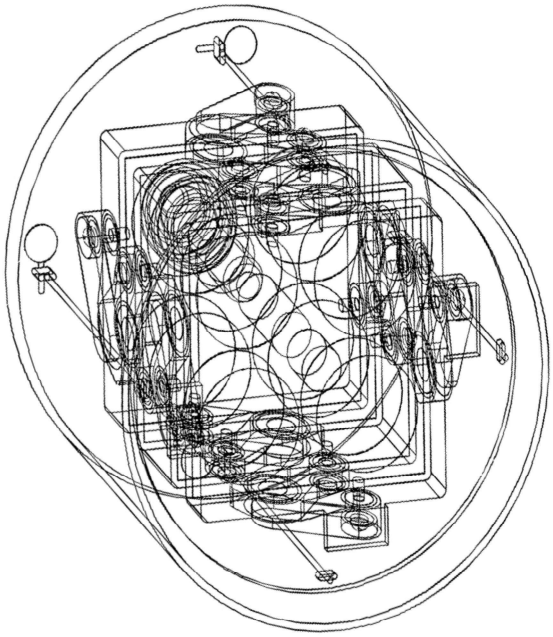
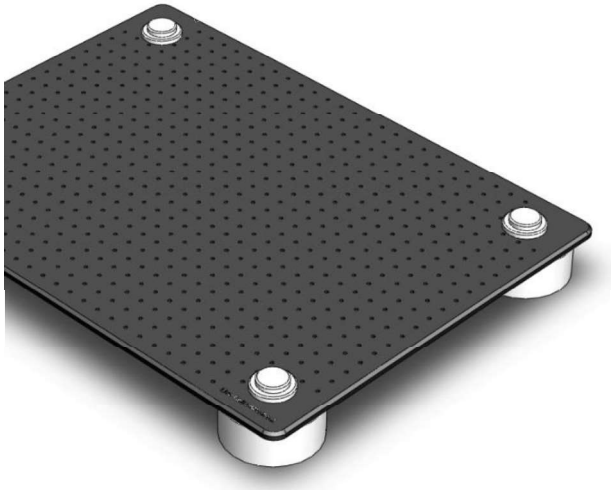
MagLevit®

Anti-Vibration Platform & Table

Magnetic Isolation Technique

Efficient Use
Easy Installation
Compact Design
Revolutionary Concept





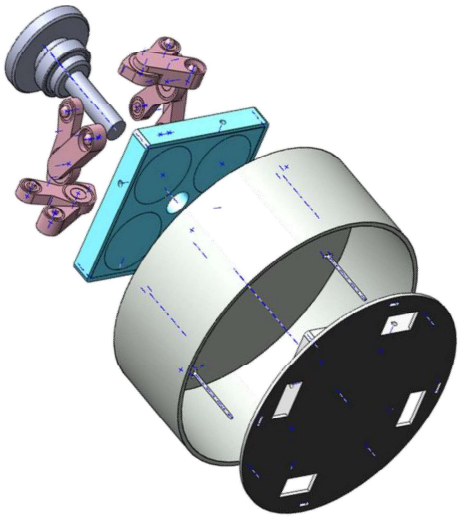


Table-Top Type MagLevit ®
Performance

Description

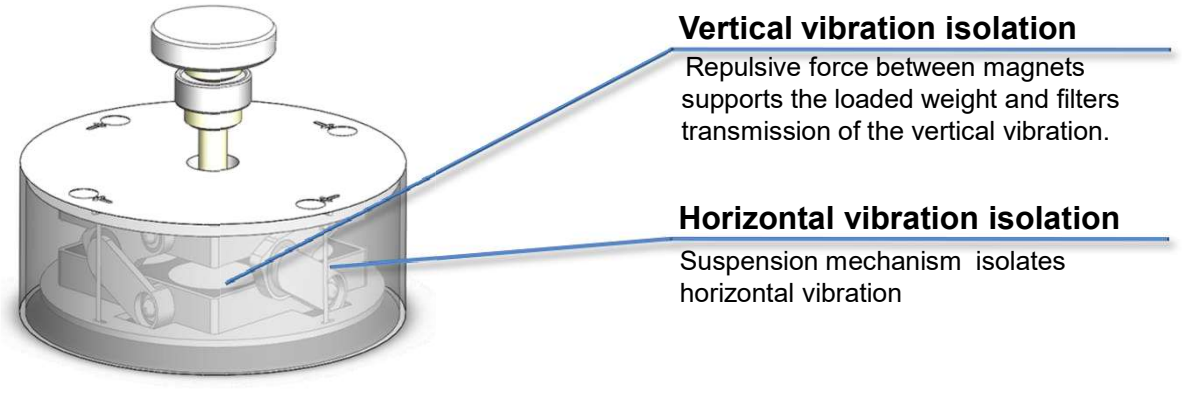
- Anti-vibration platform with a revolutionary concept in low frequency vibration
- The best performance to isolate transmission of variable vibration in all directions by two patent pending methods: vertical isolation (magnetic isolation technique) and horizontal isolation (suspension mechanism)
- A compact design to mount on any tables to fit all kinds of microscopes and live cell imaging systems.

Specification

MagLevit module adopts a new technology for vibration isolation different from existing ways using the air damping or springs.

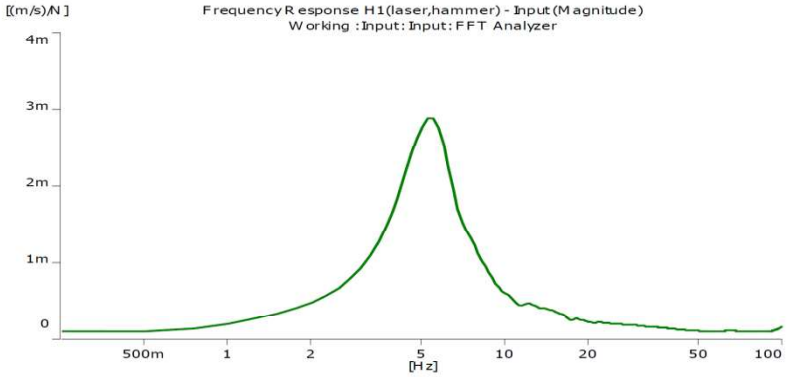
- Vertical vibration isolated by repulsive force between magnets to support the loaded weight and to prevent vibration transmission.
- Horizontal vibration isolated by flexible wires connecting magnets inner to outer structure.
- Considerable reduction of the vibration transmission contributes to microscopic imaging experiments extensively.
- None of any peripheral devices is required such as pressurized air tank or air compressor.

Table-Top Type MagLevit Module



Vertical Direction

x-axis (Log scale) , y-axis (Linear scale)



$$m\ddot{x} + kx = 0$$

$$\ddot{x} + w_n{}^2 x = 0$$

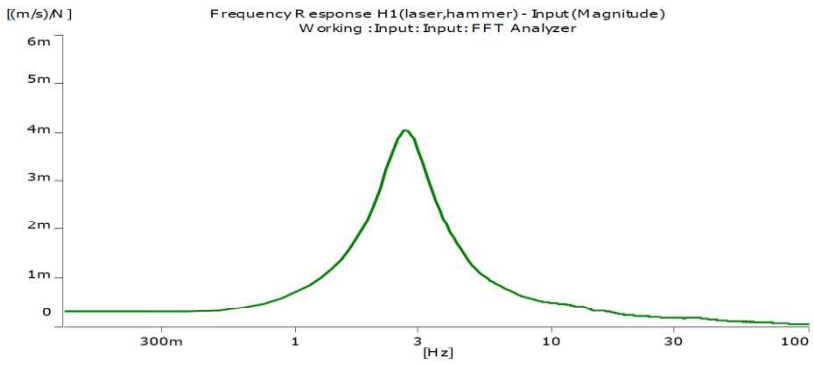
$$\therefore 2\pi f = w_n$$

$$f = \frac{w_n}{2\pi}$$

$$\left\{ w_n = \sqrt{\frac{k}{m}} \right\}$$

Horizontal Direction

x-axis (Log scale) , y-axis (Linear scale)



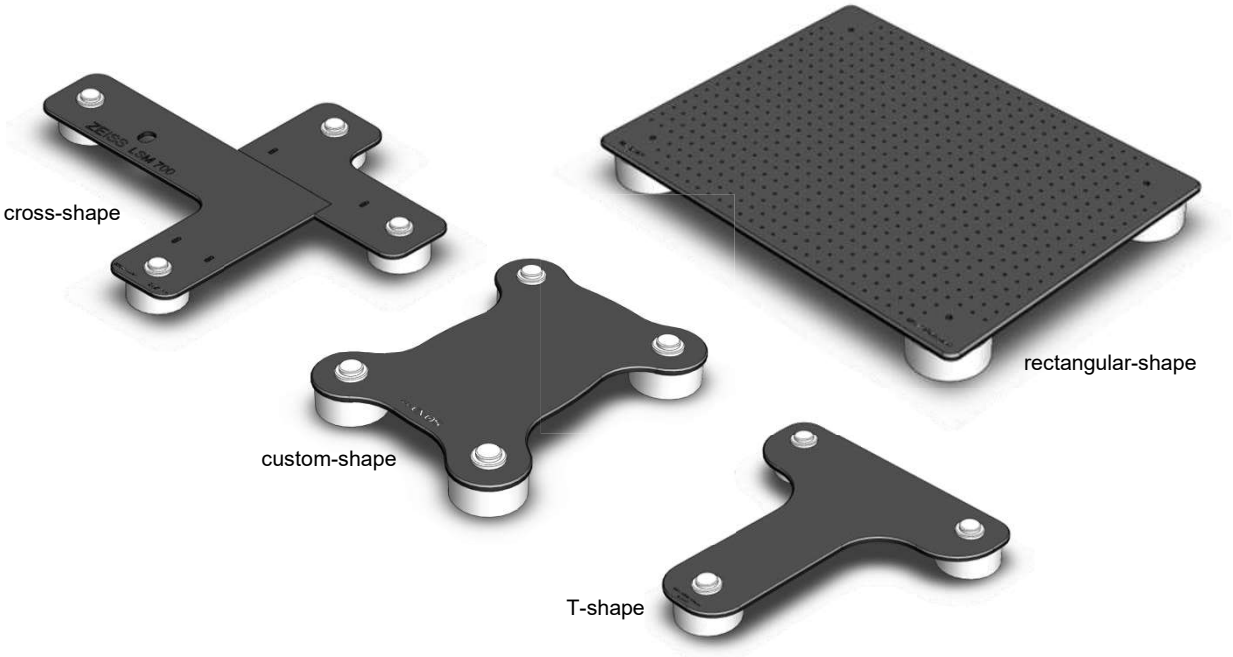
$$ml^2\ddot{\theta} + mgl\theta = 0$$

$$\ddot{x} + w_n{}^2 x = 0$$

$$\therefore 2\pi f = w_n$$

$$f = \frac{w_n}{2\pi}$$

$$\left\{ w_n = \sqrt{\frac{g}{l}} \right\}$$

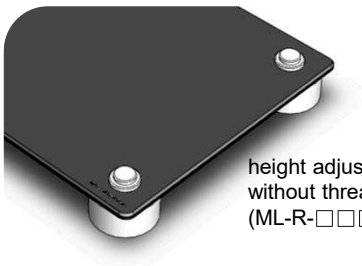


- We will custom-make any sizes or any shapes of MagLevit to fit all microscopes.
- Standard types of shapes (T / cross / rectangular shapes) depend on types of the microscopes.
- Height adjustment of the isolation module by using knobs or a hexagonal wrench
- Usable with all equipment for vibration isolation for the balance, the centrifuge, the pump, and the microscope
- Efficient installation in a very small space
- Cross shape is designed for a confocal microscope (e.g. Zeiss LSM 700 or etc.)

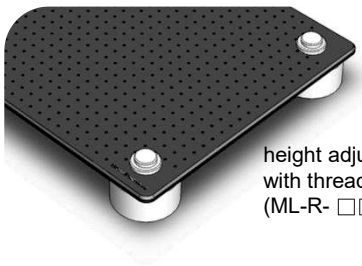
Armrest

- The arm rest is offered as an option to microscope users for easy-use of the lens-controlled knob.
- T-shape and cross shape are available.

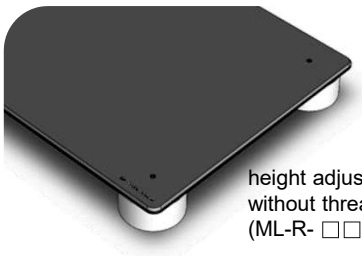
Knob & Thread Type



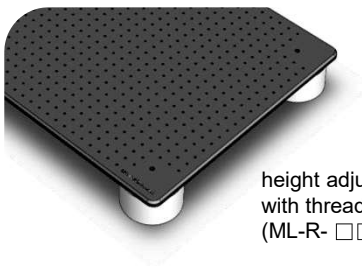
height adjustable knobs outside
without threaded holes
(ML-R-□□□□-YN)



height adjustable knobs outside
with threaded holes
(ML-R- □□□□ -YY)



height adjustable knobs inside
without threaded holes
(ML-R- □□□□ -NN)



height adjustable knobs inside
with threaded holes
(ML-R- □□□□ -NY)

Ordering Chart

Table-Top Type **MagLevit**				
Plate Size		Model No.	Height Adjustable Knobs	Threaded Holes Pattern (M6 at 25mm spacing)
Rectangular Shape	600 x 600mm	ML-R-6060	Y (Outside)	Y (With threaded holes)
	600 x 700mm	ML-R-6070		
	600 x 800mm	ML-R-6080		
	600 x 900mm	ML-R-6090		
	600 x 1,000mm	ML-R-6100	N (Inside)	N (Without threaded holes)
T-shape		ML-T-6060		
Cross shape		ML-C-6080		
Custom-make		ML-X-nnnn		

We will custom-make any sizes or any shapes of table-top type MagLevit.

(e.g.) (ML-X-nnnn)

ML-R-6060 N Y

- ML-R: Rectangular shape table-top
- 6060: 600x600mmplate size
- N: Inside height adjustable knobs
- Y: With threaded holes pattern