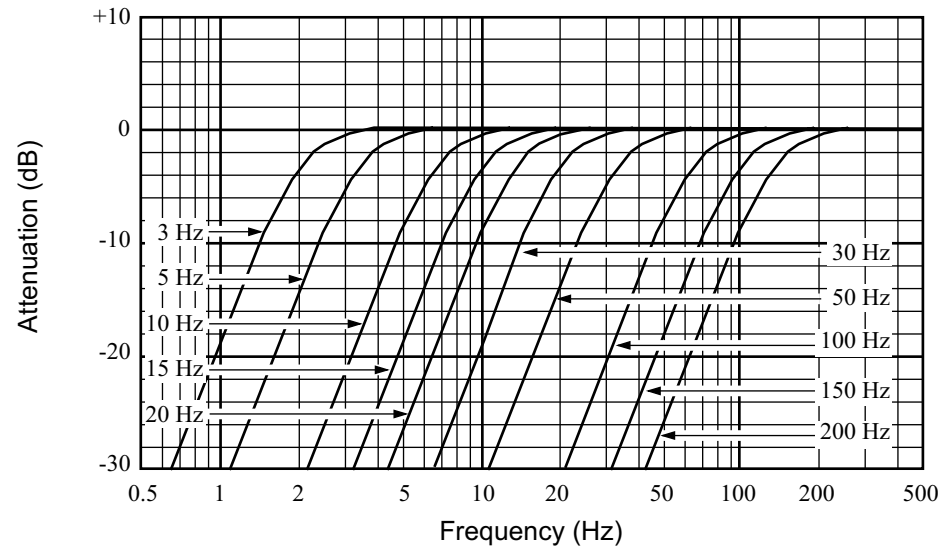


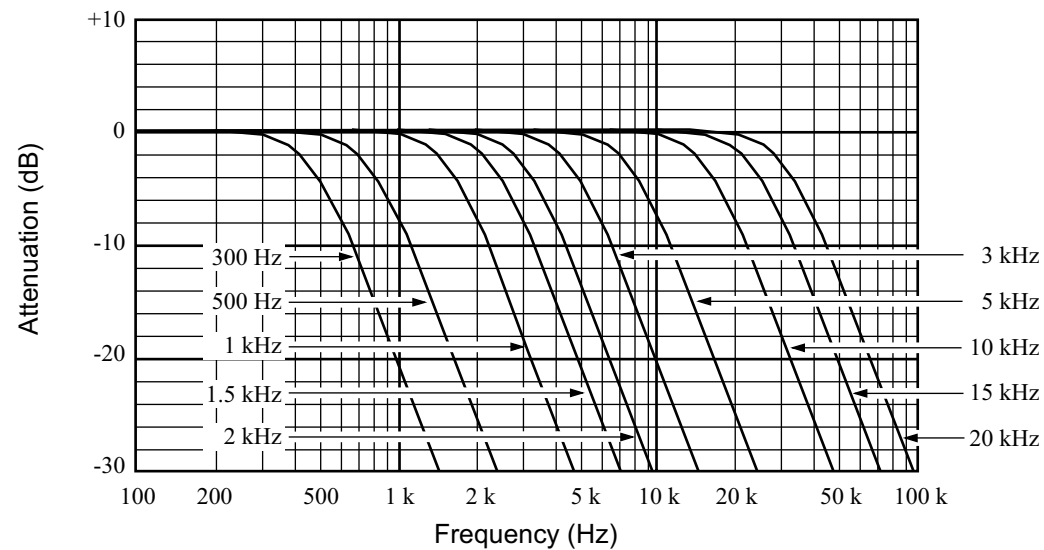
## Filter Characteristics

The graphs below show the filter attenuation slopes at various frequency settings.

### High-pass filter characteristics



### Low-pass filter characteristics



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**RION**

**FILTER UNIT  
NX-06**

The NX-06 is a filter unit designed for installation in the vibration meter unit UV-05A (UV-05). It serves to restrict the frequency range of the vibrations to be measured. The lower frequency limit is determined by a high-pass filter and the upper frequency limit by a low-pass filter, each with 10 selectable settings. The attenuation slope of both filters is 18 dB per octave, and attenuation at the selected frequency point is 0.5 dB. The NX-06 can also be installed in the sound level meter unit UN-04A (UN-04), for use during sound level measurements.

### Available Frequency Settings

High-pass filter (lower frequency limit):

3 Hz, 5 Hz, 10 Hz, 15 Hz, 20 Hz, 30 Hz, 50 Hz, 100 Hz, 150 Hz, 200 Hz

Low-pass filter (upper frequency limit):

300 Hz, 500 Hz, 1 kHz, 1.5 kHz, 2 kHz, 3 kHz, 5 kHz, 10 kHz, 15 kHz, 20 kHz

### Notes

- The filters of this unit provide an attenuation of 0.5 dB at the selected frequency. This differs from the cutoff frequency ( $f_c$ ) with an attenuation of 3 dB. You should keep this in mind when evaluating measurement results.
- When the NX-06 is installed in the sound level meter unit UN-04A (UN-04) and the RS-232-C interface is used, only the ON / OFF condition of the filter unit can be controlled via commands from the computer. Remote frequency selection is not possible. When the unit is turned ON via a computer command, the current setting of the frequency selectors (including an OFF setting) becomes active.
- When the NX-06 is installed in the vibration meter unit UV-05A (UV-05) and the RS-232-C interface is used, none of the functions of the filter unit (including ON / OFF) can be controlled via commands from the computer.

### Other Specifications

Attenuation characteristics:	18 dB / octave Approx. 0.5 dB (0 to 1.5 dB) at set frequency
Dimensions and weight:	38 × 80 × 10 mm (without protruding parts), Approx. 30 g
Current consumption:	5 mA or less
Ambient conditions for operation:	-10 to +50°C, 20 to 90% RH
Supplied accessory:	Adjustment screwdriver (1)

## Frequency Selection

The frequency selectors and the  $\times 1 / \times 10$  switches on the panel of the NX-06 are used to set the filter frequencies.

**Note:** Since the switches do not have distinct click stops, take care to establish correct settings.

### Lower limit frequency setting (high-pass filter)

Use the HPF switches on the panel

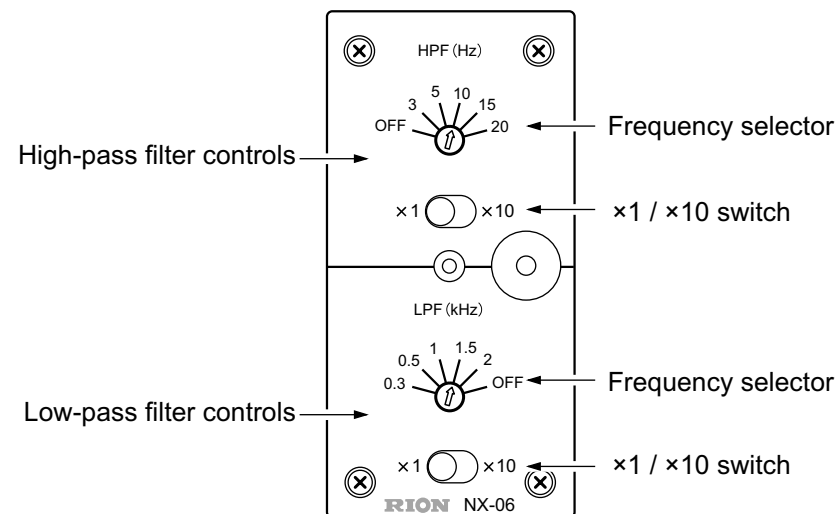
Frequency setting	Frequency selector	$\times 1 / \times 10$ switch
OFF	OFF	Any Position
3 Hz	3	$\times 1$
5 Hz	5	
10 Hz	10	
15 Hz	15	
20 Hz	20	
30 Hz	3	$\times 10$
50 Hz	5	
100 Hz	10	
150 Hz	15	
200 Hz	20	

### Upper limit frequency setting (low-pass filter)

Use the LPF switches on the panel

Frequency setting	Frequency selector	$\times 1 / \times 10$ switch
OFF	OFF	Any Position
300 Hz	0.3	$\times 1$
500 Hz	0.5	
1 kHz	1	
1.5 kHz	1.5	
2 kHz	2	
3 kHz	0.3	$\times 10$
5 kHz	0.5	
10 kHz	1	
15 kHz	1.5	
20 kHz	2	

## Switch identification

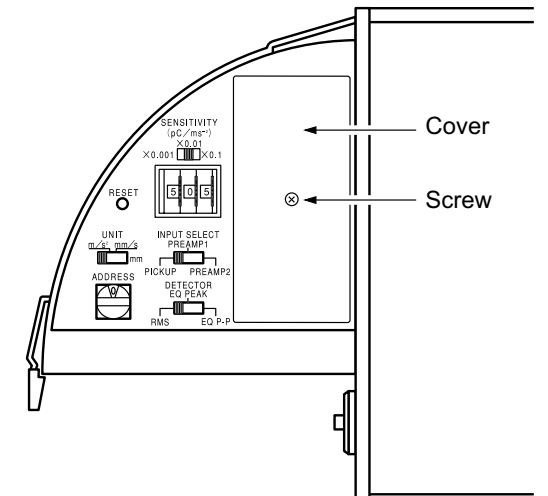


## Installation

1. Push the panel release lever of the vibration meter unit UV-05A (UV-05) or the sound level meter unit UN-04A (UN-04) down and pull out the inner panel.
2. Remove the screw and remove the installation slot cover (in case of the UV-05A (UV-05)) or the switch panel (in case of the UN-04A (UN-04)), as shown in the illustration below.
3. Insert the filter unit NX-06 into the open slot.  
Make sure that the unit is firmly seated in the socket and then fasten the unit with the screw.

### Installation in vibration meter unit UV-05A (UV-05)

Remove the installation slot cover and insert the NX-06.



### Installation in sound level meter unit UN-04A (UN-04)

Remove the panel with the HPF and LPF switches and insert the NX-06. When the switch panel is removed, the internal filters of the UN-04A (UN-04) are disabled. However, when the RS-232-C interface is used, either the internal filters or the filter unit NX-06 can be set to ON via a command from the computer. It is also possible to set both to OFF.

