



## How to Use



\*The app is available on Google Play and App Store. Calculation on the website is also possible.



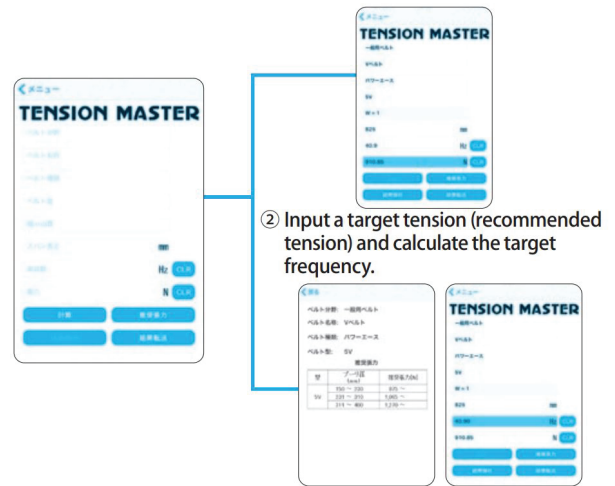
|   |                            |  |
|---|----------------------------|--|
| <b>Tension Master</b>   | <b>Smartphone</b>          | <b>Tension gauge</b>   |
| (Natural vibration measuring instrument)<br><b>Capable of measuring natural vibration</b> | Download the dedicated app | <b>Capable of measurement on the highest level in the industry</b> |

## Features

- ① As vibrations can be measured directly with the acceleration sensor, measurement can be performed even under a noisy environment.  
(A sonic-type tension gauge senses noise simultaneously with the microphone, making it likely to result in a measurement error.)
- ② Accurate measurement is possible even with a layout or belt type that emits low-frequency sound, which is difficult to measure with the sonic type.
- ③ Measurement accuracy on the highest level in the industry.
- ④ The calculation function software can be used with a smart phone (tablets can also be used).
- ⑤ It can also be used as a measuring instrument for natural frequency of equipment, machinery, or buildings.

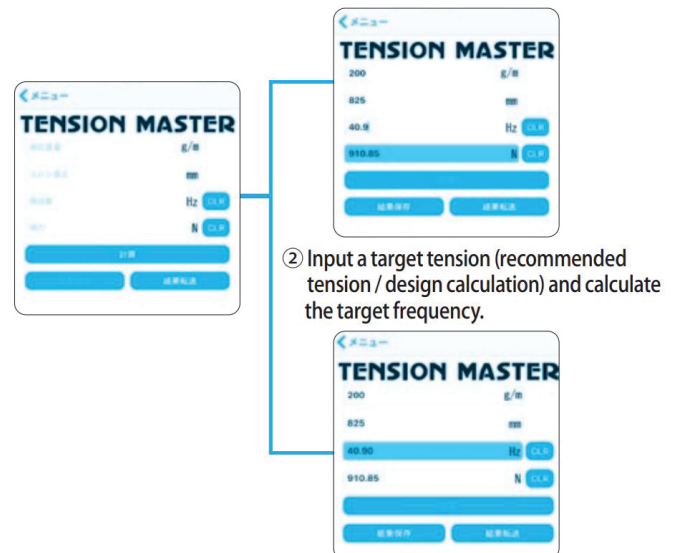
### Pattern 1 Tension calculation by selecting a belt

- ① Input operating conditions.
- ② Measure the frequency with the Tension Master. → Input the frequency and calculate

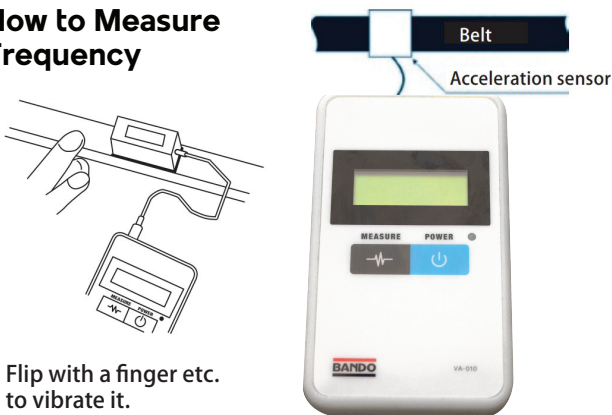


### Pattern 2 Tension calculation from the unit weight

- ① Input a unit weight and span length of the belt.
- ② Measure the frequency with the Tension Master. → Input the frequency and calculate the tension.



## How to Measure Frequency



Flip with a finger etc. to vibrate it.

## Measurement accuracy

- Measurement range of natural frequency: 10 to 1000 Hz
- Measurement accuracy of natural frequency:  $\pm 1\%$
- Sampling frequency: 3.2 kHz
- Operating ambient temperature:  $-10^{\circ}\text{C}$  to  $60^{\circ}\text{C}$