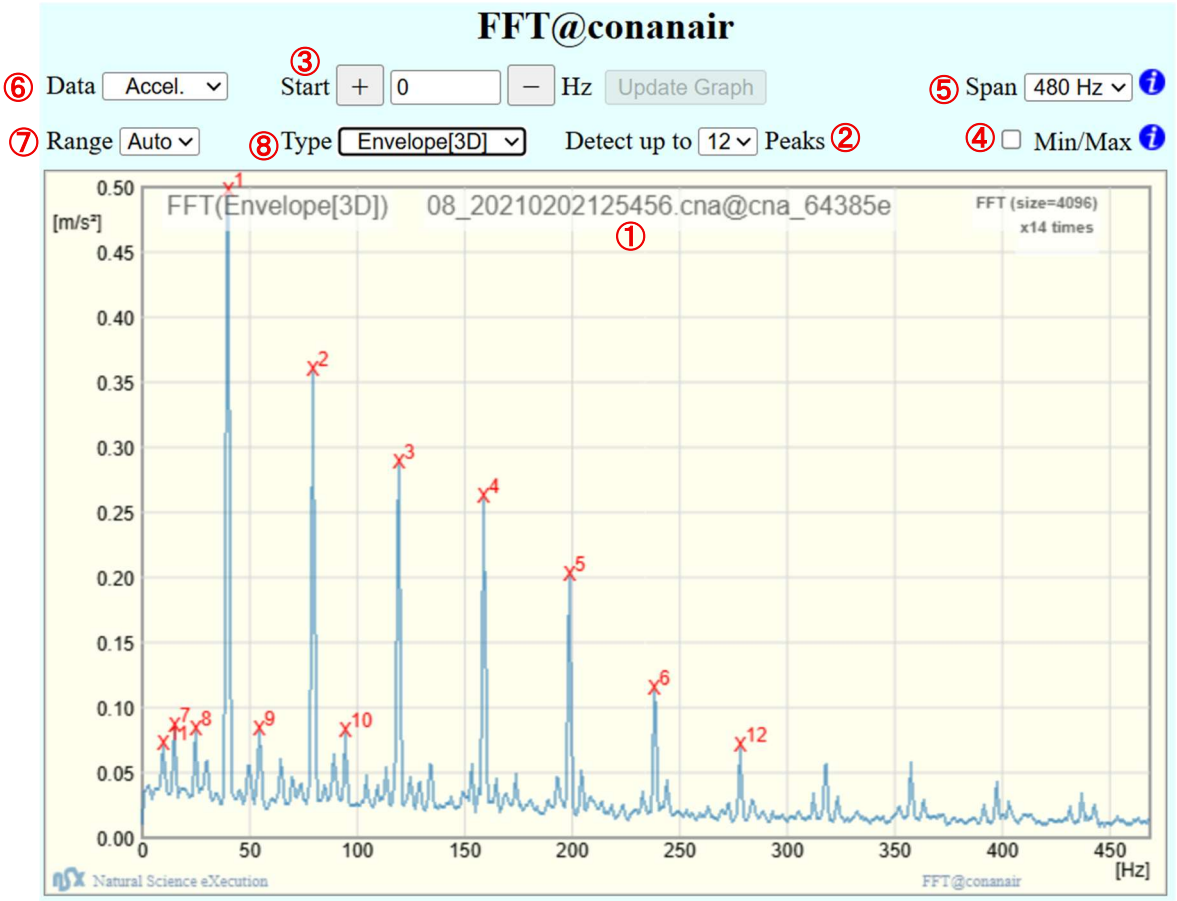


① Data：Select the type of raw data to be processed.

- Accel., Velocity, LF Accel. (Acceleration containing low frequencies [10 Hz or less])

② Type：Select an analysis method

- EnvelopeFFT[*] : 3D Envelope FFT and Envelope FFT for Each Axis of XYZ
- Raw[*]: FFT of the Raw Waveforms on Each XYZ Axis
- Waveform[*]: Display raw waveforms in a time series, either individually along each axis or simultaneously along all three axes

③ Range：You can select the range of the vertical axis on the graph.

- You can set the range of the vertical axis to any value you choose.

  To make it easier to understand the relative sizes of values when switching between data sets

- When “Type” is “Waveform[*],” the options for “Range” change.

  The options for specifying values will be bipolar (±).

  When “Data” = “LF Accel.” and ‘LPF’ is available, the “LPFAuto” option is added.

  Since the “Range” is determined based on the signal before the ‘LPF’ is applied, it becomes easier to see the changes that occur when you adjust the “LPF” settings.

Since the “Range” is determined based on the signal after LPFAuto (“LPF”) processing, it is displayed larger, making it easier to see fine details.

④ Span： The frequency range is adjustable

- 0～ 15 Hz (Frequency resolution: approximately 0.025 Hz)
- 0～ 30 Hz (Frequency resolution: approximately 0.05 Hz)
- 0～ 60 Hz (Frequency resolution: approximately 0.1 Hz)
- 0～120 Hz (Frequency resolution: approximately 0.2 Hz)
- 0～240 Hz (Frequency resolution: approximately 0.4 Hz)
- 0～480 Hz (Frequency resolution: approximately 0.8 Hz)
- 0～960 Hz (Frequency resolution: approximately 1.6 Hz)
- 0～1.6 kHz (Frequency resolution: approximately 3.2 Hz)

Perform multiple FFTs on 32,000 samples of raw vibration data and display the average value

⑤ In the range of 0 to 240 Hz or higher, the □Min/Max display can now be shown or hidden.

⑥ The starting point on the horizontal axis can be changed as desired.

⑦ The number of detected peaks can be adjusted

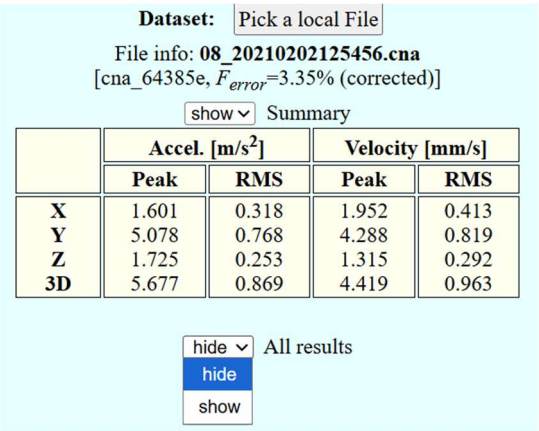
- Setting it to 12 can sometimes be inconvenient, so if you set it to zero, the peaks will be hidden in both graphs and tables.

⑧ Display the file name and conanair ID on the graph

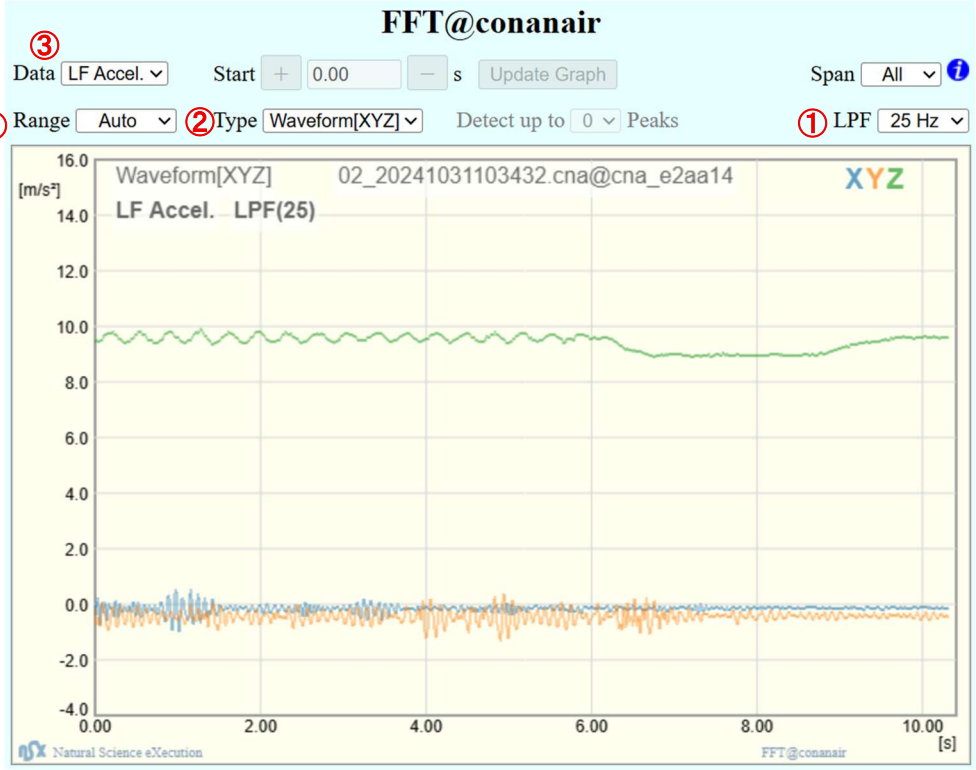
- Make sure the source of the data is clear even if you just copy and paste the graph

⑨ All results” can be shown or hidden.

- The default setting is hidden (it probably won't be used very often).
- You can select and copy and paste the data into Excel or other applications (the data is usable).
- Since it can be quite heavy on smartphones and other devices (exceeding 8,000 lines at most)



Data: LF.Accel —Description



① LF.Accel:

・This corresponds to “acceleration including gravity.”

・Although FFT ignores gravitational acceleration, if there is a change in orientation during measurement, a large peak may appear near 0 Hz.

② When “Waveform[*]” is selected from the “Type” drop-down menu

・When “Type” is set to “Waveform[*],” ‘Start’ and “Span” are specified in seconds.

③ LPF (Low-pass filter)

・If “Data”=“LF Accel.” and ‘Type’=“Waveform[*],” you can use “LPF.”

④When “Type” is set to “Waveform[*],” the options for “Range” change.

・The options for specifying values will be bipolar (±).

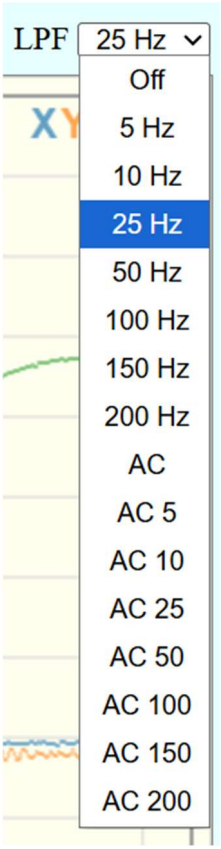
・When “Data” is set to “LF Accel.” and ‘LPF’ is available, the “LPFAuto” option is added.

- Since the “Range” is determined based on the signal before the ‘LPF’ is applied, it is easier to see the changes that occur when you adjust the “LPF” settings.

LPFAuto

- Since the “Range” is determined based on the signal after the “LPF” is applied, the display range becomes wider, making it easier to see fine details.

<Explanation of the “LPF” Selection Option>



Off - “LPF” is not applied, and the original signal waveform is displayed on the graph.

xxx Hz - An “LPF” with a cutoff frequency of xxx Hz is used.

AC - The average value (DC component) of the signal waveform is subtracted, which corresponds to the AC mode for electrical signal measurement. “LPF” is not applicable.

AC - An “LPF” operating in xxx AC mode with a cutoff frequency of xxx Hz is used.

FAQ That's not a bug!!!

Q1 The graph is not displayed

A1 It appears that the "Range" setting is incorrect.
When Data=LF Accel. and Type=Waveform[*], the graph may stick to the top or bottom of the chart if the Range setting is incorrect.

Q2 Unable to select "Data=LF Accel."

A2 That's what happens when Type=Envelope[*]

Q3 "Start" cannot be changed

A3 Everything should be displayed even if you don't change the "Start" settings.
If Span=1.6k or All, all data will fit within the graph display area.

Q4 The range fluctuates unexpectedly

A4 In the following cases, the range is automatically changed to prevent potential inconsistencies in the settings:

- Change the Type setting from Waveform[*] to something else ⇒ Range=Auto
- When Range=Auto, change the LPF setting to AC... ⇒ Range=LPFAuto

Q5 "Detect up to" cannot be changed

A5 That's what happens when Type=Waveform[*].

Q6 Envelop[*] cannot be selected under "Type"

A6 That's what happens when "Data=LF Accel." is set
(Please change 'Data' to "Accel.")

Q7 The Min/Max labels sometimes appear and disappear

A7 It appears in the following cases and disappears otherwise

- Except for Type=Waveform[*]
- Span is 240 or greater

Q8 LPF appears and disappears

A8 It appears in the following cases and disappears otherwise

- With Type=Waveform[*],
- Data=LF Accel.