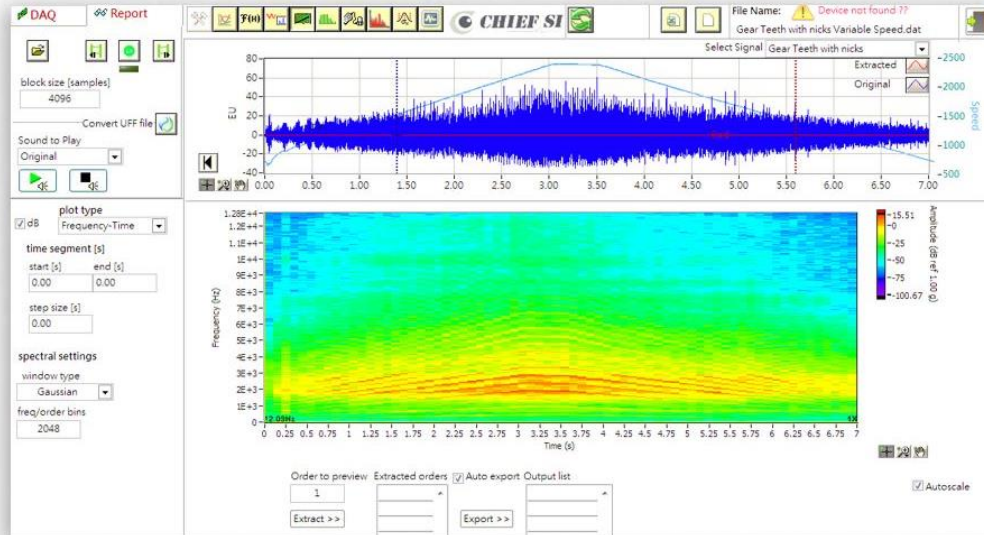# FLEXDSA

Spectrum analyzer designed for noise and vibration

System Feature
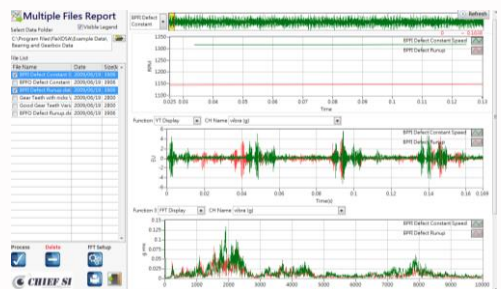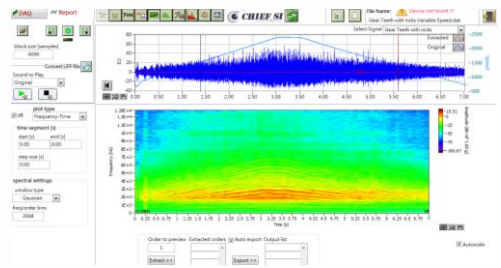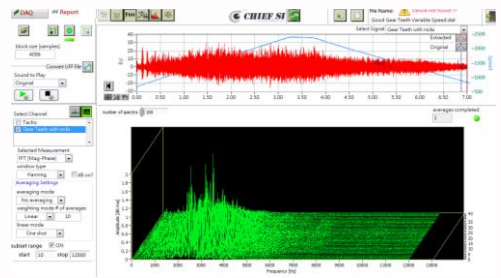
- Max bandwidth: 102.4 kHz

- 24-bit resolution.

- Provides analysis functions as YT, FFT, Water Fall, FRF, Vibration Level, etc.

- Option of analysis function of SRS, Order, Octave, Floor Vibration, etc.

- Multi-file spectrum comparison.

- Support UFF file format.

- Directly play sound.

- Export measuring data and graph into Excel format.

- Solution of DSA for Vibration and Noise.

- Option of various analysis functions.

- Feasible price.

Application

- Vibration and noise measuring, logging and analyzing.

- Motor, floor vibration and engine noise inspection.

Specification

DSA	Version	Base, Advanced, Professional
	Channel	Max. 32
	Bandwidth	102.4 kHz Max. [Note1]
	Simultaneous sampling	Yes
	Resolution	24-bit
	IEPE support	Yes
	Input couple	AC or DC
	AC cutoff(Hz)	0.1Hz ~ 3.4Hz (depend on hardware) [Note2]
	Signal output	SINE, Swept sine, White noise, Pink noise [Note3]
Function	FFT	FFT, Power spectrum, Power spectrum density
	Windows type	Hanning, Hamming, Blackman, Flat Top
	Averaging mode	RMS, Peak Hold
	Weighting mode	Linear, Exponential
	Display	Spectrum, Phase, Water fall
	FRF	H1/H2/H3 mode, Magnitude & Phase, Coherence
	Vibration level	Acceleration, Velocity, Displacement
	Calculate	Mean, Max, Min, P to P, RMS
	Multi-file compare	Yes
	UFF output	Yes
	Play sound	Yes
	Output format	Excel (data and graph)
	Order	Color map、Order extract
	Octave	1/24, 1/12, 1/6, 1/3 Octave
	Floor Vibration (Option)	VC-A/B/C/D/E
	Rotation Vibration (Option)	RV
	QC(Option)	YT limit, FFT limit
Environment	Support language	English
	CPU	P4(min), RAM:1GB, HD:1GB, USB 2.0
	OS	XP, Win 7, Win10
	Monitor	1280*800 resolution

Version

Function	Description	Version		
		Base	Advanced	Professional
Configuration	Configuration	✓	✓	✓
	Trigger	✓	✓	✓
	Tachometer		✓	✓
	dB reference edit		✓	✓
	Max. channel	5	32	32
Analysis	YT	✓	✓	✓
	Power spectrum	✓	✓	✓
	Power spectrum density	✓	✓	✓
	FFT	✓	✓	✓
	Waterfall	✓	✓	✓
	Windows	✓	✓	✓
	Average	✓	✓	✓
	Vibration level [note4]	✓	✓	✓
	Statistics [note5]	✓	✓	✓
	Octave [note6]		✓	✓
	FRF		✓	✓
	Order			✓
	Color map			✓
	Order tracking			✓
	Time frequency			✓
Option	R V	✓	✓	✓
	Floor vibration	✓	✓	✓
	QC	✓	✓	✓
Report	Play back	✓	✓	✓
	Sound	✓	✓	✓
	Filter	✓	✓	✓
	EXCEL	✓	✓	✓
	ASCII	✓	✓	✓
	UFF58		✓	✓
	Multi-File compare	✓	✓	✓

Note 1: Bandwidth: 9234: 25.6 kHz,   4431: 51.2 kHz, 4432:51.2 kHz,   4462: 102.4 kHz

Note 2:-3dB Cut-off Frequency: 9234: 0.5Hz,   4431: 0.8Hz,   4432: 0.1Hz,   4462: 3.4Hz

Note 3: Only for 4431

Note 4: Acceleration, Velocity, Displacement

Note 5: Mean, RMS, Max, Min, P to P, Peak of FFT

Note 6: Weighting (A, B, C, Linear), 1, 1/3, 1/6, 1/12, 1/24 Octave

Optional analysis module: Floor Vibration, RV

Optional hardware module: RPM sensor   Chief RPM01   /   Engine Probe   Chief PB01