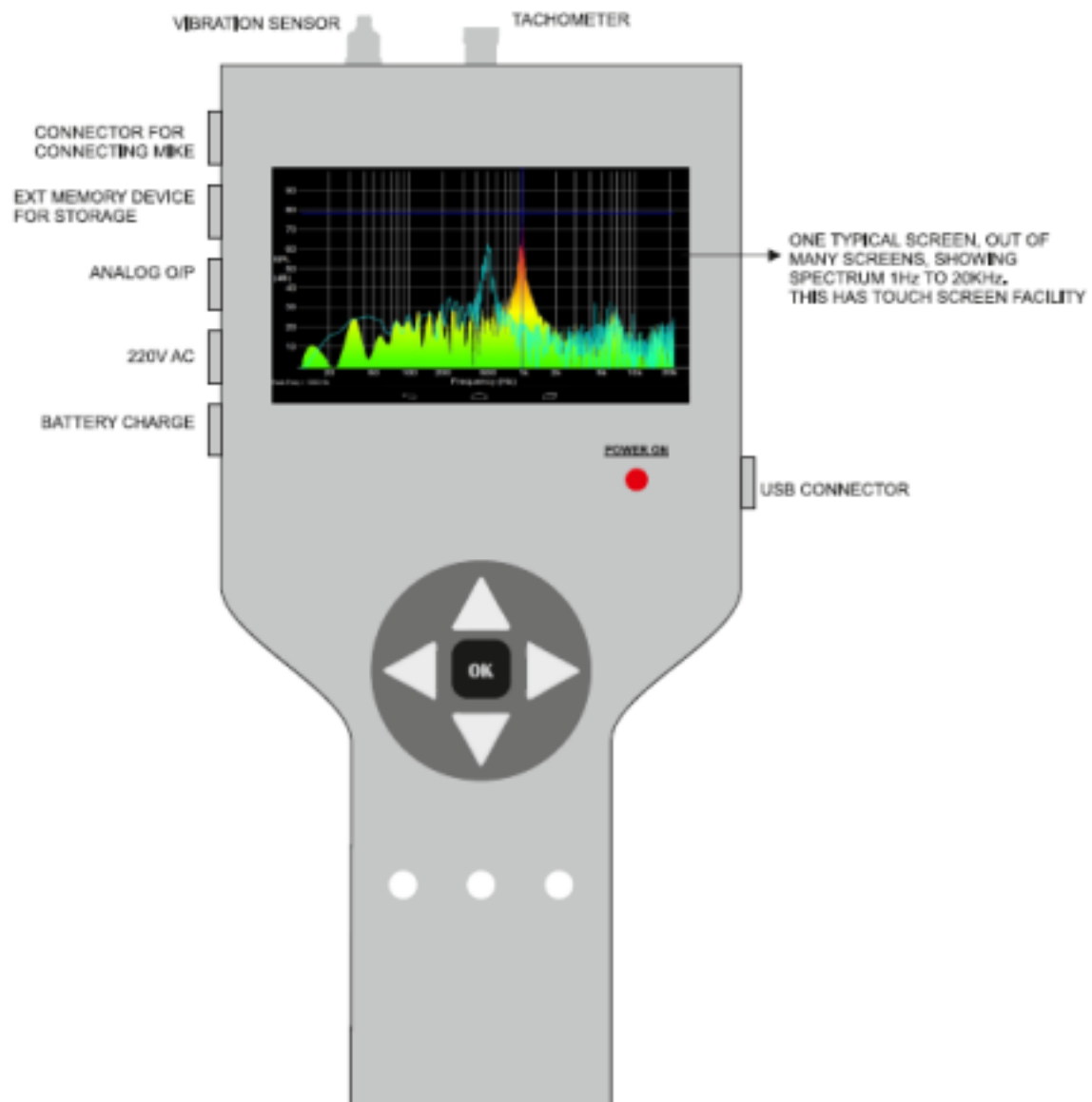## Engine Vibration Analyser:

This hand held vibration analyser unit can be used by avionics technicians and line maintenance personnel. It is designed for measuring the vibration and noise. This instrument can be used to measure the roughness of the Aircraft, Helicopter Engines etc. The engine roughness is scanned as engine vibration signal with the help of accelerometers to convert the vibration (Frequency, displacement, acceleration) signals into electrical signals for purpose of analysis.

This unit uses FFT (Fast Fourier Transform) Analysis module to measure vibration and noise. Proposed unit is easy, safe and has latest technology to measure noise and vibration levels. The analyser combines advanced analysis techniques, tap-and-drag operation and a wide dynamic range to become the perfect on-location machine vibration tool. Acceleration, velocity, and displacement are parameters traditionally used to assess an engine's health when initially installed or during Maintenance, Repair and Overhaul (MRO). Frequency analysis based on the FFT algorithm is employed which is an advance tool for measurement and diagnostics of machinery noise and vibration. The frequency 'profile' of a machine is its fingerprint, revealing its sources of noise and vibration and their paths to the measurement position.

Brief Technical Specification:

Sl No.	Description	Specification
1	Main Application	Maintenance , Repair and Overhaul (MRO) of engines and other machinery
2	Technique employed	FFT analysis of sound or vibration
3	Interface	Interface to PC having software for analysis, archiving and Report Generation
4	Other parameters	Time domain integration to velocity and displacement
5	Engineering values	RMS and true peak values available for acceleration, velocity and displacement
6	Display	Dual overlay spectrum display
7	Transients	Captures Transient events
8	Recording	TTL output for control of external devices like Signal Recording etc Record input signal, one or dual channels, for later playback or analysis
9	Handling	Portable
10	Self Test	Self Test feature available – on Power ON & during operation continuously

VIBRATION SENSOR

TACHOMETER

CONNECTOR FOR
CONNECTING MIKE

EXT MEMORY DEVICE
FOR STORAGE

ANALOG O/P

220V AC

BATTERY CHARGE

ONE TYPICAL SCREEN, OUT OF
MANY SCREENS, SHOWING
SPECTRUM 1Hz TO 20KHz,
THIS HAS TOUCH SCREEN FACILITY

POWER ON

USB CONNECTOR

OK

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