

3 Channel RealWave Analyzer

PDA 3 Ch Multi-Function Analyzer
Human Vibration (ISO 8041)
Ship Vibration (ISO 6954)
Real-Time FFT & Spectrogram
Digital Filter Based Octave Analyzer
0.5Hz ~ 80Hz Bandwidth

www.svdigital.com
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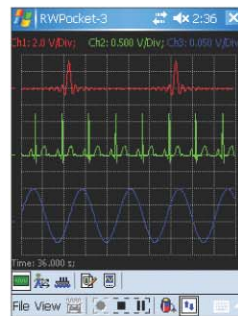
SV CORPORATION
Total Solution of Sound & Vibration

3 Channel RealWave Analyzer

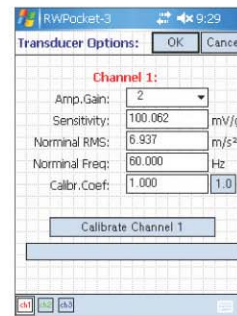
The Data acquisition card using CF Card Type II is inserted to the Compact Flash memory Slot of PDA to analyze Real Time 3-Ch Human vibration or Ship vibration as a portable low frequency vibration Analyzer.

General

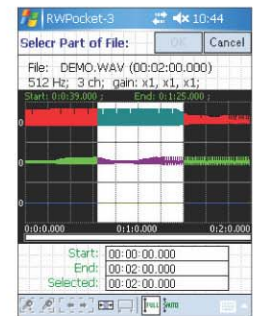
- 3-Ch IEPE Type Accelerometer AC input
- Real time data (wave file) store and replay
- Sensitivity Calibration by Software
- Measurement configuration setup for objective and axis
- Select Part : Time axis extension
- Sampling Frequency : 512 Hz
- Input signal gain :
1, 2, 4, 8, 16, 32, 64 times selectable



3-Ch Oscilloscope



Calibration



Time Select part

Human Vibration (ISO 8041)



Human vibration 3 axis Seat Accelerometer

- Filter : Human – NO, BL (Band Limit),
– Wb, Wc, Wd, We, Wj, Wk, Wm
- Whole Body Combined Filter
- RMS, MTVV, MSDV, VDV, PEAK, P2P, cf values output

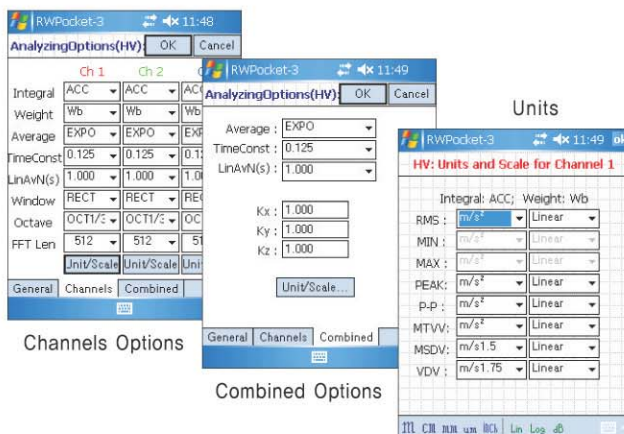
Ship Vibration (ISO 6954)



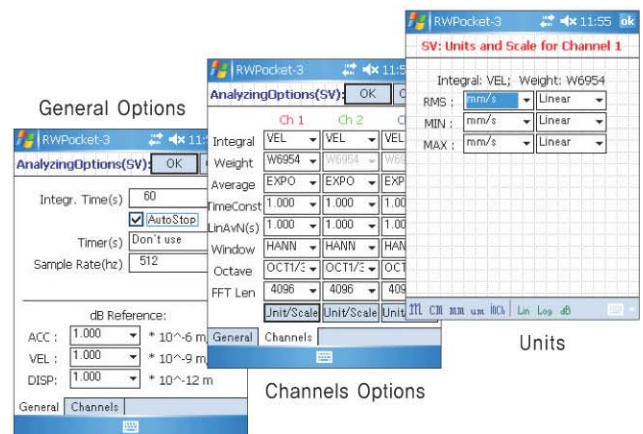
Ship vibration 3-axis Accelerometer

- 3-axis Accelerometer
- Filter : Ship – NO, W6954
- RMS, MIN, MAX values output

Human Vibration analyzing windows

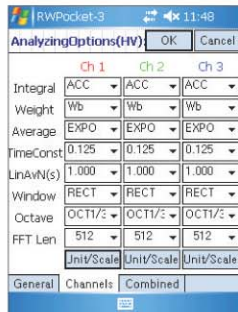


Ship Vibration analyzing windows





Common Analyzing

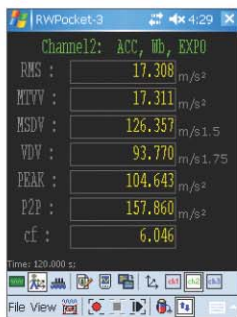


Analyzing options (Human vibration)

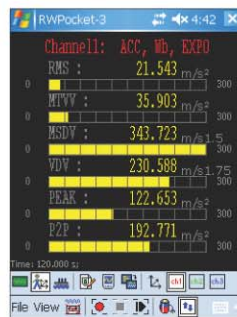
- Detector : ACC, VEL, DISP
- Average : NONE, LINEAR, EXPO, PEAK
- Time Constant : 0.125sec, 1sec, 2sec, 5sec, 8sec
- Windowing : Rectangular, Hanning, Flattop
- Nth Octaves : 1/1, 1/3 Octave
- FFT Length : 512, 1024, 2048, 4096
- Scale : Linear, Log, dB
- Unit : m/s², cm/s², mm/s², um/s², in/s², g
- Auto Peak Detecting, Auto-Scaling

Various Display Type

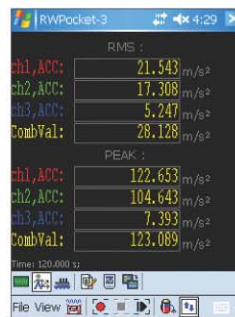
- Display: TRACE, FFT, OCTAVE Graphs of 3-Channel's
- 3-Channel RealWave supports 5 types display



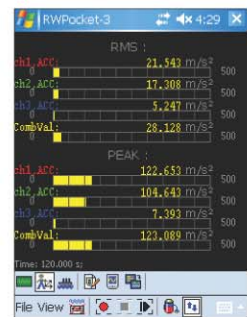
Ch2 Human vibration value display



Ch1 Human vibration value Bar display

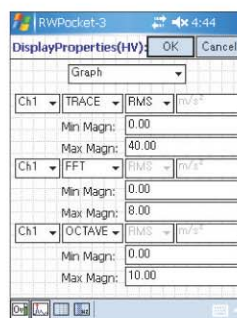


3-Ch's Human vibration compare by RMS & Peak

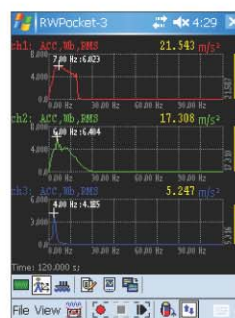


3-Ch's Human Vib. compared bar display by RMS & Peak

- Functions of Graph display
- Convenient display change button
- Overall Value display
- Peak Auto Detect
- Log Frequency scale
- Set Frequency range in FFT graph



Graph display Options



3-Ch's FFT Display



1-Ch Trace, FFT, Octave

RealWave Desktop Program

- Data Export
 - image file: BMP, JPEG
 - Text file: TEXT, EXCEL
- Recording & Transducer & Analyzing Information
- Trace, Octave, FFT graph control
- Time or Frequency axis extension view



PC program : Information of result file and Graphs

Standard Configuration of PDA System

- PDA HP iPAQ hx210 or hx2700, hx2400
- 3-Channel RealWave Analyzer Hardware (CF Card Type II)
- Microsoft ActiveSync, Firmware Upgrade Program
- 3-Channel RealWave Analyzer Software
- USB Sync Cable
- 2GB SD memory Card
- Manual
- Aluminum Bag for PDA and CF card (370mmX270mmX80mm)

Specification of PDA and CF Card

- Specification recommended PDA : HP iPAQ hx210 series, hx2700, hx2400 series
- Input Range : ± 5 V (peak)
- Dynamic Range

Gain	Input (V)	Vibration	
		m/s ²	dB(Ref 10 ⁻⁶ m/s ²)
1	5	0.03 ~ 981	70 ~ 160
2	2.5	0.015 ~ 490.5	64 ~ 154
4	1.25	~ 245.3	58 ~ 148
8	0.625	~ 123.6	52 ~ 142
16	0.3125	~ 61.3	45 ~ 136
32	0.15625	~ 30.7	45 ~ 130
64	0.078125	~ 15.3	45 ~ 124

Accelerometer Sensitivity : 50mV/g

- Gain of Input Signal (Digital Gain) : 1, 2, 4, 8, 16, 32, 64
- SNR : More than 95dB
- Sampling Frequency : 512Hz
- Frequency Bandwidth : 0.5Hz ~ 80Hz
- Interface : CF Card Type II(16.7Mbps)

Application

- Human Vibration Level meter (ISO 8041)
- Ship Vibration Level Meter (ISO 6954)
- Real Time FFT
- Real Time Octave
- Wave file recording
- Linear, Log, dB scale selectable

Optional Accessories

- Human Vibration
 - 3-axis Accelerometer for human vibration and cable
 - 3-axis seat Accelerometer for human vibration and cable
 - PDA Extended Battery
 - SD memory Card (2GB)
 - 3 Ch RealWave Desk Program
 - Water, Dust Proof case
- Ship Vibration
 - 3-axis Accelerometer for ship vibration and cable
 - PDA Extended Battery
 - SD memory Card (2GB)
 - 3 Ch RealWave Desk Program
 - Water, Dust Proof case

System Composition



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