

## RH802 Dual-channel vibration analyzer

The ROZH dual-channel vibration analyzer RH802 is developed specially for industrial field environment. It has easy operation system, the function modules of Route plan, Off-route plan, Dynamic balance, Coast up/down and Bump test are displayed in less than 10 interfaces. The software is operated on ARM directly, without the operation system, it runs more stable and avoided the situation of slow boot. Both starting up and shutdown can be finished in one second, which greatly saved user's time on site.



### Product key features:

- Simultaneous two channel measurements for data collection, the maximum analysis frequency can reach to 40 KHz.
- ARM processor, the 12800 lines FFT can be finished in one second.
- Support for long waveform data collection of 40K dual channel analysis frequency, the maximum length can reach to 256M.
- Provide high precision 24 bit AD converter.
- Use 1GB high-capacity Flash.
- IP65 design, water and dust proof.
- Rechargeable Li-ion battery supports eight hours of continuous data collection.
- iButton used to identify the measuring points automatically.

## Function modules—the modules can be selected by users

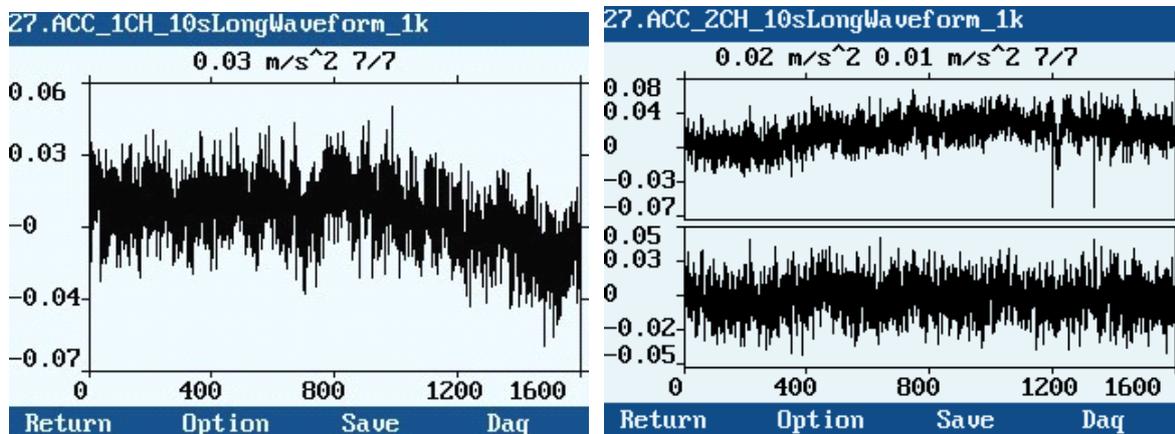
### ※ Route plans

Route measurements downloaded from PC-program, then collect data according to the stated measurement definition, support for dual channel route collection.

Select Route Plan	
plan#1	0 /6
checkPlan#18	0 /4
checkPlan#2	0 /4
Return      Delete      Confirm	

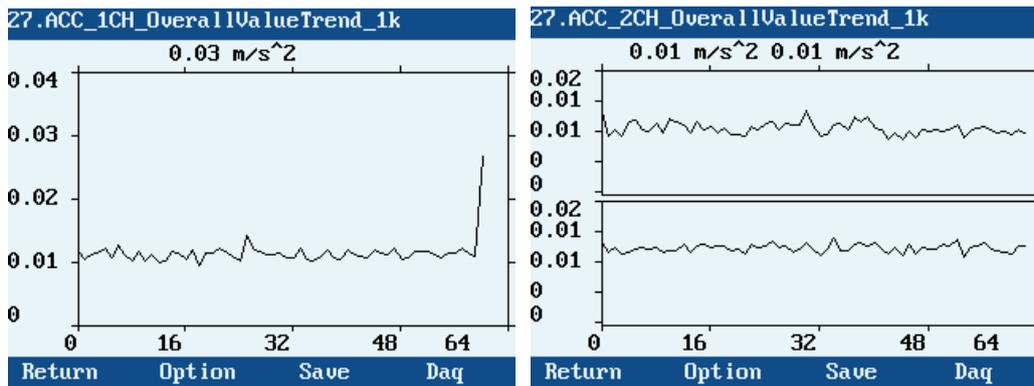
### ※ Long waveform collection

support for dual channel long waveform, has maximumly 40KHz analysis frequency and 256M single waveform.



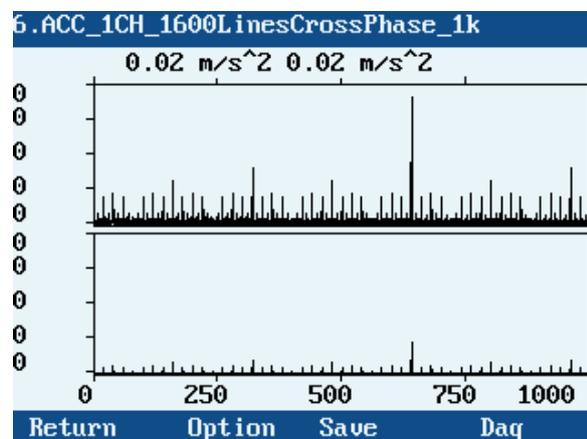
### ※ Overall trend

Can catch the changes process of machine's transient vibration overall value, which is convenient to analyse the connection between machine's vibration changes and technological parameter on site, the time interval can be set as needed.



※ **Cross phase**

Users can view cross-power spectrum and phase difference spectrum in the meanwhile, and measure the phase difference between two measuring points though dual channel data collection without accelerometer.



※  **Run-up and Coast-down**

With RH802, users can catch the vibration data during machine's coast up/down conveniently, the vibration data can be collected through equal time intervals or equal RPM intervals.

※  **Single/double plane balancing**

Users can finish the whole balancing process through instructions, all of the data in balancing process can be saved, users can input data manually for on site using and have many times remnants correction until the result is acceptable.

Daq Parameter Setting	
BalanceSurface NU	1
SignalType:	Acceleration
TestWeightType:	RemoveTestWeight
UnitOfAngle:	Degrees
AverageNum:	1
BalanceLevel:	G0.4Level
RotorQuality(kg):	100
RadiusOfTestWeigh	100
<div style="display: flex; justify-content: space-between; padding: 0 10px;"> <span>Return</span> <span>Bal Info</span> <span>Confirm</span> </div>	


**Bump test (optional function)**

The bump test is to measure machine's natural frequencies, which supports for the trigger type of amplitude rising edge and falling edge.


**Off-route plans**

This can help users to measure any off-route tasks for single/dual channel, the collection of waveform, spectrum, long waveform, overall value and cross phase can be finished in one interface, it's easy to operate, and the collected data can be saved under any selected measuring point for convenient checking.


**View data**

The route or off-route data under one plan can be viewed in one interface through arrow keys, it greatly saved time for interface switch. RH802 also provided calculation function for time domain, spectrum, time domain index; and cursor function for single, double, frequency doubling and side frequencies.


**Electronic button**

With the iButton navigation function, RH802 can identify the measuring points automatically, when have data acquiring, the operation staff only need to touch the iButton with the E-tag of measuring point's location, the system will identify and

navigate to corresponding route task and display the previous measuring information accordingly.

## RH802 Technical parameter:

Items	Specification
Analog input	
Channels	Channel 1: vibration (ICP accelerometer) , Voltage ( $\pm 21V$ AC or DC) Channel 2: vibration (ICP accelerometer) 、 Voltage ( $\pm 21V$ AC or DC) ,tacho channel
Transducer	Accelerometer, Velocity, Displacement, voltage transducer
Signal range	$\pm 21V$
A/D conversion	24 bit
Analog measurement	
Integration	once、 twice integration
Maximal analysis frequency	40kHz (dual channel Maximal: 20kHz)
Sampling frequency	256Hz – 102.4kHz
Dynamic signal range	96dB
Precision	1% ( 0.1dB)
Signal processing	
Configuration	Sampling frequency, low band pass filter, Sampling length, users can set any value as needed.
Lines	400, 800, 1600, 3200, 6400, 12800
Time domain Sampling	1024, 2048, 4096, 8192, 16384, 32768
Window function type	Hanning, Rectangle window
Averaging	Linearity, peak hold
Averages	1,2,4,8,16,32,64,128
Analysis	
Long time domain	Maximal waveform is 10M, maximal analysis frequency of

waveform	Dual-channel is 10KHz, maximal analysis frequency of single channel is 20K.
Overall value	Minimum interval: 0.1 sec
XPM measurement	view XPM and phase difference spectrum simultaneously
Dynamic balance	On site 1 or 2 plane dynamic balance by Influence coefficient method
Coast up/down testing	Equal time intervals, Equal RPM intervals
Basic index	
LCD	True color LCD, 320×240pixles, contrast adjustable
Keys	22 keys
Communication	USB, 900KB/s
Storage capacity	1G
iButton	DS1990A
Communication	USB 2.0
Battery	Rechargeable Li-ion battery, charging time around 4 hours; working Time (Continuous) >10 Hours; two channel working time >8 Hours
Temperature	(-10~50)°C
Humidity	95% RH without condensate
Protection grade	IP65
Dimension	190 X110 X50mm
Weight	660g

### RH802 main accesories photos:



#### A complete unit of RH802 contains:

- |                               |  |
|-------------------------------|--|
| 1 pc Instrument incl. Battery | 2 pc Vibration Transducers with magnet base  |
| 1 pc Optical RPM transducer   | 2 pc connecting column and verification card |
| 1 pc Reflective tape          | 1 pc quick start manual                      |

1 pc adapter  
1 pc USB cable  
1 pc transfer cable for RPM transducer  
1 disk with software, user manual and relative study files

1 pc carrying case for instrument  
1 pc tachometer holder

**ROZH reserves the right to make changes in this product catalogue.**



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