
Shale Shaker Vibration Analysis Kit

User Guide

Description

Motionics shale shaker vibration analysis kit is an iPad-based vibration analyzer specialized for shale shakers. The two accelerometers in the kit can be attached to a test point to measure 2-direction vibrations. Accelerometer signals are acquired through the 2-Channel DAQ box mounted on the back of an iPad and passed to the Shale Shaker App through iPad lightning port. In the Shale Shaker App, users can see 2-Channel vibration spectrum, waveform and G Motion X-Y orbit plot. Vibration peak values or RMS values can be recorded and saved to a test report.

Included in the Package:

- Accelerometer with coiled cable 2x
- Accelerometer magnetic base 2x
- 2-Channel DAQ box (integrated on the iPad cover) 1x
- Protective carrying case 1x
- Shale Shaker App 1x
(iPad App to analyze the vibration and motion of an industrial shale shaker through accelerometer inputs)
- iVibraMeter App 1x
(ISO-10816 based overall vibration evaluation tool on iPad)
- VibraTestPro App 1x
(iOS App to evaluate vibration severity and view vibration spectrum on iPhone/iPad)

Quick Start

1. Attach the iPad cover with DAQ box to the back of the iPad
2. Connect the accelerometers to the DAQ box
3. Plug in the lightning cable of the DAQ box to the lightning port of the iPad
4. Attach the accelerometers to the testing machine
5. Launch an App to start testing
 - For shaker vibration test, please use Shale Shaker App
 - For general vibration test, please use iVibraMeter or VibraTestPro
6. If it's first time use, calibrate the system from the Setting of the Apps. You need a 1G standard shaker for calibration. Also, you can restore the system to the last calibration status by entering the calibration value included in the package.
Note that in Shale Shaker App calibration should be done for each channel separately with individual accelerometer. You can save the accelerometer serial number in the calibration page after each channel calibration value for future reference since the same accelerometer should be used with each channel.