ANCO Engineers, Inc.
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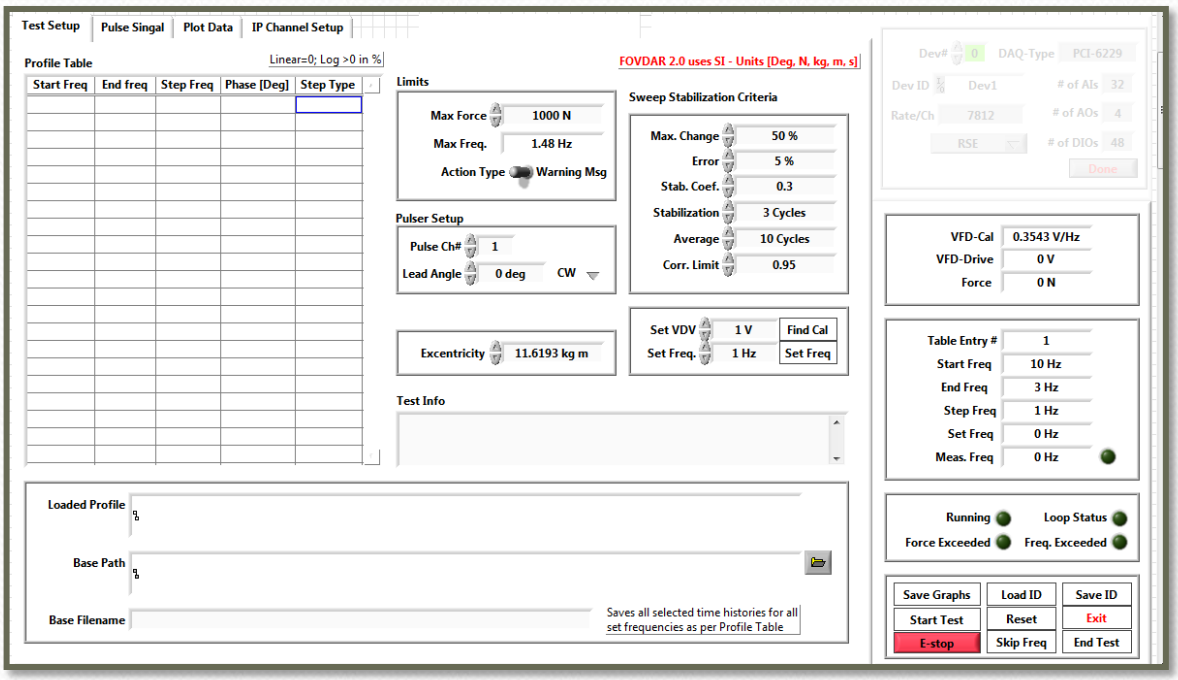
FOVDAR: Sinusoidal Forced Vibration Test Controller

FOVDAR is a PC based hardware and software system that drives eccentric mass vibrators (EMV's) while analyzing feedback signals for amplitude and phase shift. FOVDAR-H is used for similar control of servo-hydraulic actuator vibrators. Using FOVDAR and vibrators allows the determination of modal properties of full sized civil and mechanical structures in the field. It uses a non-contact magnetic pulser to keep track of frequency and phase. All sensor input signals are analyzed with respect to that pulse. A user defined profile table defines the frequency sweep characteristics. There are numerous automatic and user controlled options for optimizing the sweep to increase data accuracy and reduce test time. All analogue input and output signals are generated or read with National Instruments (NI) hardware.

Features

- Output of analogue signals to drive one or multiple VFD motors/vibrators.
- 16 standard (expandable to 128) freely assignable analogue input channels to read a wide variety of sensors.
- Real time monitoring and display of force, eccentricity, and frequency.
- Real time data display of in phase component, out of phase component, amplitude modulus, and phase.
- Real time data analysis tools such as correlation verification allowing to see confidence levels of recorded data sets.
- Options for conversion from acceleration to velocity and displacement and normalization to force.
- Data set review feature without the need of running the EMV.
- Export data to MS Excel and as ASCII files to allow easy import into other programs.



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