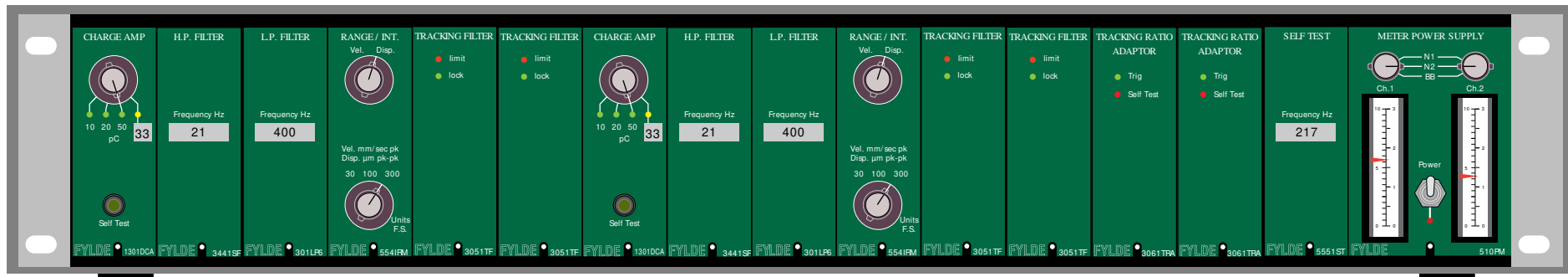


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Example "Green Panel" Vibration Monitor system



System depicted features 2 Differential Charge amplifiers for 2 channels and will give outputs of velocity and displacement. Twin meters allow immediate inspection of signals. All modules are plug in for instant upgrade or configuration change. Inputs are to the rear panel. Power is 115 or 230VAC 50/60Hz.

'Green Panel' Vibration Monitor Modules



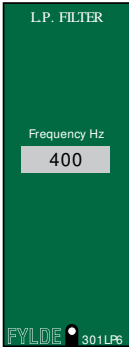
Tracking Filter FE-3051-TF

The FE-3051-TF is a frequency controlled tracking bandpass filter with a standard range of 20 Hz to 1 kHz. (lower frequency ranges may be specified if required.) The tracking filter may be connected via the Tracking Ratio Adaptor (FE-3061-TA) to be centered at harmonics of the rotational speed. The filter gives an AC output at unity gain, and also a rectified and filtered DC output at 1 V DC for 1 V AC.



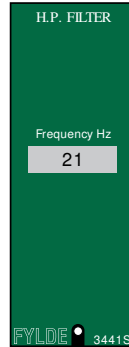
Tracking Ratio Adaptor FE-306-TRA

The Tracking Ratio Adaptor satisfies the requirement to tune the system's FE-3051-TF tracking filters to harmonics which may be fractions or multiples of a fundamental frequency. This unit accepts the fundamental frequency input from a tachometer transducer which may be a magnetic pick-up or other transducer type. It provides optical isolation and synthesizes an appropriate harmonic frequency from multiply/division factors set by banks of on board switches.



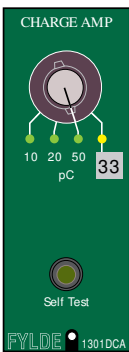
Low Pass Filter FE-301-LP6

This module sets the highest frequency of interest for the application. It is a fixed, user specified frequency with the value marked on the front panel. The pass band is unity gain and the frequency response is 6 pole Butterworth which provides very low in band ripple.



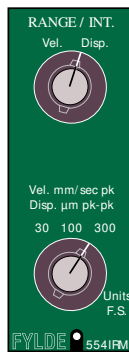
High Pass Filter FE-3441-SF

This module sets the lowest frequency of interest for the application. It is a fixed, user specified frequency with the value marked on the front panel. The pass band is unity gain and the frequency response is 6 pole Butterworth which provides very low in band ripple. A special dual frequency version is available.



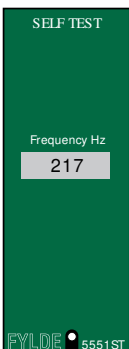
Differential Charge Amp FE-1301-DCA

This module may be set to an input range of 10, 20 or 50 pC/g and a user specified input range is also available. A precision integrator provides a velocity output in addition to the acceleration output. The acceleration output is scaled at 10 mV RMS / g (peak) and the velocity output is scaled at 2 mV RMS / mm/s (peak). A front panel control allows the module to substitute the system self test signal for the input signal providing through calibration.



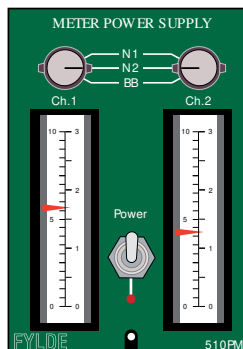
Range Change / Integrator FE-554-IRM

The FE-554-IRM incorporates scaling and integrator functions to provide both velocity and displacement outputs in metric units (mm/s and μm). Systems requiring scaling in imperial units (in/s and mils) may use the alternative FE-554-IRI module.



Self Test Module FE-5551-ST

This module produces a precision sine wave simulating a velocity and displacement signal. This signal is routed directly to the input of the system's charge amplifiers allowing complete system validation and calibration. The signal is also routed to the Tracking Ratio Adaptor(s) allowing stable self test outputs to be generated by the Tracking Filter(s).



Meter Power Supply FE-510-PM

This module incorporates the system power supply for all modules in the system. Two indicating meters enable monitoring of N1, N2 and Broad Band signal levels for two channels. The power supply operates from 110V or 230V ac 50/60Hz