



ENGINE VIBRATION AND BALANCE ANALYZER SYSTEM

Model CV610D Balance Tracker™



The Model CV610D Balance Tracker™ is a full-featured analyzer system that minimizes costly engine removals and reduces unnecessary maintenance by allowing operators to test and balance turbine engines while in place. It is the replacement for the following instrumentation: SD119, SPS610 and CV610C BalancePRO. An engine balance analysis can be accomplished in as little as three minutes, representing minimal downtime and maximum cost savings. With the system being quite light weight and capable of operating on the internal battery system for over eight hours, you can take it anywhere and get the job done.

FEATURES

- Multi-speed, multi-plane, multi-sensor capable
- Reliable, single-pass balancing of a variety of rotating devices including turbine engines, steam engines, pumps, and motors
- Automated data acquisition for fast, accurate balance solutions in minutes
- Expandable and upgradeable through the use of modular architecture
- Field tested with major aircraft and engine manufacturers to assure excellent results
- Rapid return-on-investment through on-wing testing to eliminate unnecessary engine removals or inefficient maintenance actions
- Balancing backed by state-of-the-art dynamic signal analyzer for in-depth troubleshooting and analysis of machinery status
- Battery operated for over 8 hours or on available aircraft power
- Vibration surveys and balance solutions by engine serial numbers

EXAMPLE CONFIGURATIONS

<u>Platform</u>	<u>Engine Type</u>
B707	PW-JT8D
B727	PW-JT8D
B737-200/200C	JT8D-15A/JT8D-17A
B737-300/400/500	CFM56-3
B747-100	CF6-50E2/RB211-525D4
B747-400	CF6-80C2/PW4056/RB211-524G
DC-8	CFM56-2/PW-JT8D
DC-9	PW-JT8D
DC10-10	CF6-6D / CF6-6D1
DC10-15/-30	CF6-50C2F/CF6-50A
MD11	CF6-80C2
MD82	JT8D-217
MD83	JT8D-219
MD87	JT8D-217C/JT8D-219/JT8D-200
MD88	JT8D-219
L1011-250	RB211-542B4
A300-600	CF6-80C2
A310	CF6-80A3/CF6-80C2A2
A330	PW4000/CF6-80E1A1
Regional/Business Jet	CF34
LCAC	Lift Fans and Prop Fans
Industrial / Marine	LM2500 / LM5000
Other Engines	CFE738 / TFE731-2B / TFE731-5B



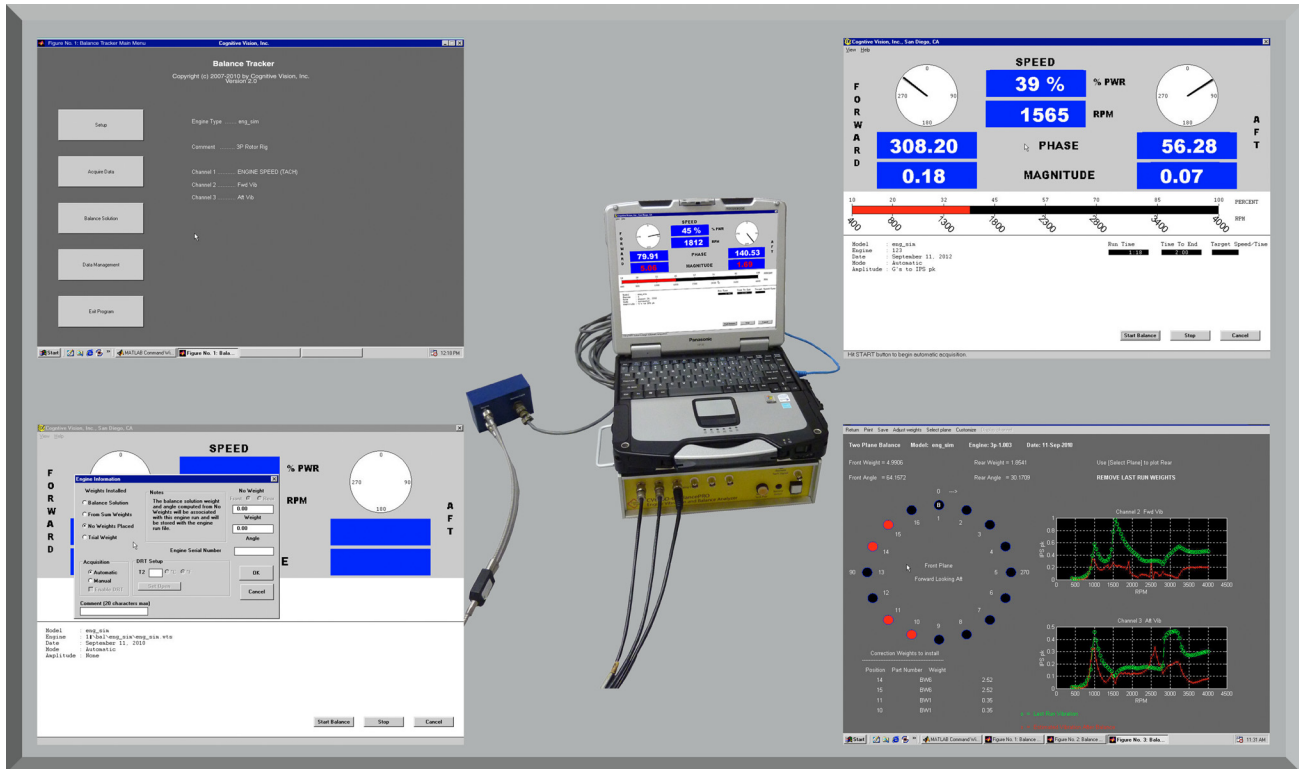
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Model CV610D Balance Tracker™ Engine Vibration and Balance Analyzer System



Specifications

Balancing methods:

- One shot using stored influence coefficients
- Baseline Run and Trial Weight Run
- Calculates an interactive least squares solution over all engine speeds and active channels

Balance speeds:

- Engine speed - 300 to 100,000 RPM

Balance channels:

- Up to six channels simultaneously acquired; accelerometers, velocity transducers, or displacement probes can be the vibration sensor
- Tachometer - Two dedicated channels

Data acquisition:

- Automatic - delta RPM on slow engine run-up
- Manual - engine dwell at specific balance speeds

Balance weights:

- Up to ten standard weight classes
- Displayed by class and manufacturer's part number

Balance planes:

- Single or dual plane solutions
- User selectable front, rear, or both
- Customize for available locations and weights
- Weight vectoring for fractal weight solutions

Vibration and Tachometer Signals

- Contact factory for specifics

Balance solutions:

- Graphic presentation of recommended weight and location to clarify weight position
- Predicted and actual vibration levels versus RPM after each computed balance solution
- Balance solution can be customized and optimized for user-defined speed range
- Software accounts for existing weights and weight limitations
- Final plots of before-and-after vibration survey comparisons

Optional MIL-STD-810G Notebook Computer:

- Intel Core i7 with 4 GB of host RAM, 10/100 BaseT Ethernet, 13.3-inch sun light readable LCD screen, 250 GB HD drive, Windows 7 graphic user interface, kybd with built-in touchpad mouse, and over 8 hours operating time without external AC power

Weight / dimensions:

- 6.5 pounds / 11.33" W x 3.50" H x 10.00" D (CV610D-6)
- 8 pounds / 11.9" W x 2.9" H x 11.5" D (Opt Computer)

Cognitive Vision has been supplying gas turbine customers with instruments, instrument systems, and complete kits for years. Please contact Cognitive Vision for further details.

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Specifications and product availability subject to change without notice.

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