

VibPilot

NEW!

Vibration Controller & Dynamic Signal Analyzer

**Small in Size.
Huge in Performance.**



- The All-in-One Device for Professional Vibration Testing and Dynamic Signal Analysis
- High-Precision Measurement and Real-Time Performance in a Compact Design
- 4- and 8-Channel Input - Easily Expandable
- Operation Indoors and Outdoors in Any Environment

Dynamic Signal Analysis

VibPilot fully supports m+p international's SO Analyzer software for accurate and efficient noise and vibration measurements, third-party data import/export, data analysis and reporting of your results.

With the SO Analyzer software, VibPilot provides all the hardware features in one box for the widest range of applications in dynamic signal analysis:

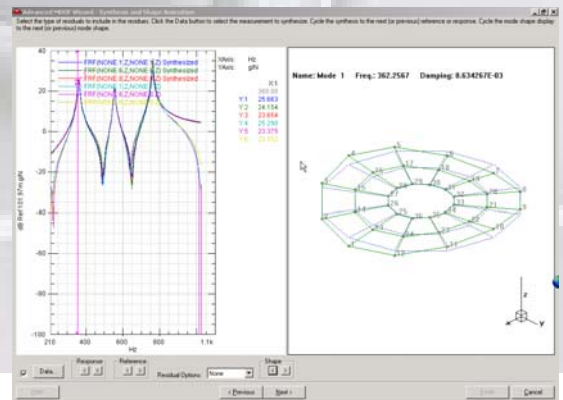
- General data acquisition
- Time history recording (throughput to disk)
- Modal analysis
- Rotating machinery testing
- Impact testing
- Acoustic analysis
- Environmental testing
- Vehicle pass-by-noise testing

VibPilot's 24-bit resolution A/D converters and its excellent dynamic range provide the necessary precision to make the SO Analyzer well suited for the most demanding tasks in dynamic signal analysis in the field and in the laboratory. The fan-less, noise-free operation of the VibPilot enables noise measurements requiring a quiet environment. Two tacho inputs are included with 32-bit high-speed up/down counters for measuring synchronous signals on rotating machines or for use as COLA synch inputs for shaker sine reduction applications.

With a multi-channel analyzer such as the VibPilot it is crucial to have a powerful tool for central management of the potentially large data sets acquired.

Therefore the SO Analyzer software provides you with comprehensive capabilities for

browsing, viewing, editing, analysing and reporting data as well as with full ActiveX compliance.



With the 4/8-channel VibPilot, m+p international sets a new standard for affordable performance in vibration control and dynamic signal analysis.

VibPilot is based on the latest generation of IC technology resulting in high-precision measurement ability and impressive real-time performance in signal analysis. Equipped with 24-bit sigma-delta A/D converters with up to 102.4 kHz sampling rate, the VibPilot allows for alias-protected measurements in a frequency range up to 40 kHz and with more than 120 dB spurious-free dynamic range.

Compact and rugged, VibPilot has a robust look and feel and has a clearly arranged front panel with four or eight BNC connectors. Thanks to its dust-proof design you can operate it indoors or outdoors even under harsh conditions. VibPilot provides USB 2.0 connectivity to a host PC or laptop and is operated by either an external AC mains power supply or alternatively, by a 9 - 36 V DC supply, e.g. for in-car operation.

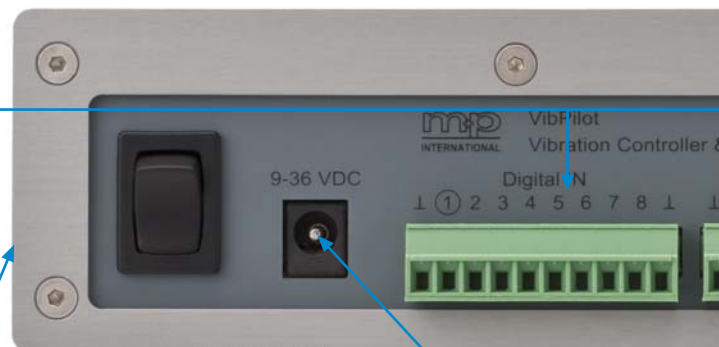
To extend input channel capability it is possible to synchronize two or more VibPilot devices by means of the clock in/clock out circuitry without influencing their performance. This allows you to use additional channels (e.g. 2 x 8 input channels) or to combine vibration tests and dynamic signal acquisition applications with ease.

**Small in Size.
Huge in Performance.**

Eight digital inputs and outputs for remote control

Compact, rugged, dust-proof chassis: 211 x 50 x 190 mm

DC supply e.g. for in-car operation



Vibration Testing

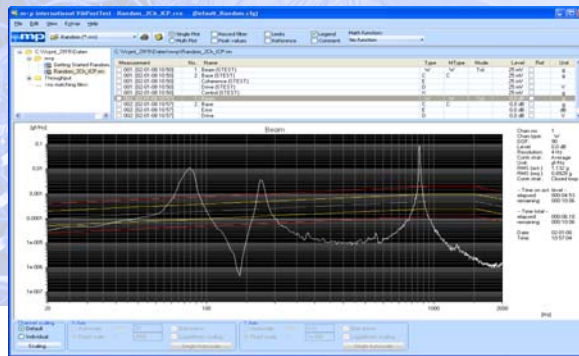
The VibPilot instrument covers the full functionality of our proven VibControl shaker control software and all test modes that are used in vibration testing today, everything from simple ESS random and sine testing to mixed mode gunfire simulation. Drop table capture, time history recording to throughput disk as well as unlimited time data replication and road load simulation mean that m+p international can tackle the widest range of requirements. All tests are fully compliant with ISO, DIN, MIL-STD 810 and all other vibration testing standards.

Using true multi-tasking functionality, the VibControl software is extremely robust in operation and allows you to run multiple tasks in parallel from the same keyboard without loss of real-time control. A variety of sophisticated analysis and reporting functions helps you to complete your testing job with a minimum of fuss.

The eight digital inputs and outputs enable automatic operation under climatic chamber control for combined environment test programs. Individual tests can be easily combined in any complexity of nested loops. When the system is left unattended, e.g. for an overnight or weekend run, you can still be in control: Test status reports are sent via email or SMS text message to your mobile phone.

Two 300 MHz floating-point dynamic signal processors in each unit pre-process the data, thus guaranteeing the high performance and short control cycles.

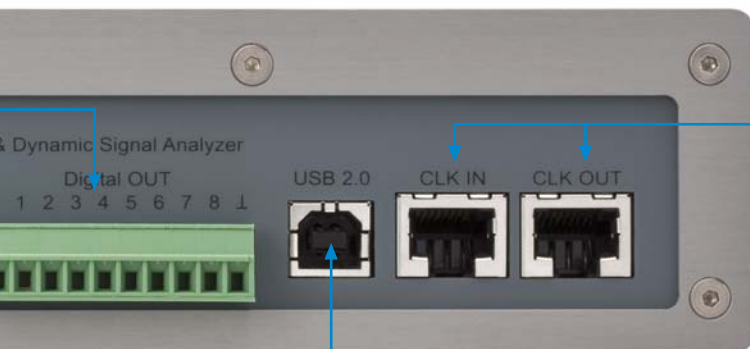
For the most critical tests time sample data can also be recorded in parallel with control to the throughput disk without any reduction in control performance.



VibPilot's analog input circuits have advanced sigma-delta converters which offer advantages such as simultaneous sampling by independent A/D converters on each input, reduced noise and improved accuracy due to 64 times oversampling on each input, both analog and digital filtering is used for full anti-aliasing protection and they provide excellent low-level signal-to-noise performance and differential linearity.

Two precision low-noise analog outputs are available together with hardware shutdown circuitry which ramps down the source signals in a controlled manner in case of emergency.

As well as normal differential voltage inputs with AC/DC coupling, signal conditioning for the analog input channels also provides source capabilities for ICP sensors including cable break indicators and an interface for accessing standardised Transducer Electronic Data Sheets (TEDS). TEDS support allows automatic front-end setup based on information stored in the transducer, e.g. sensitivity, calibration and serial number.



USB connectivity to a host PC or laptop

Synchronization extends input channel capability



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Are you searching for a compact multi-channel instrument meeting the most demanding requirements of today's vibration testing *and/or* dynamic signal analysis?

An instrument that handles general data acquisition and signal processing tasks as reliably as sine, random, shock and mixed mode testing, modal analysis, rotating machinery testing, acoustics, etc.?

A mobile, yet powerful and highly precise instrument that covers the complete measurement process from acquisition to reporting and can be operated in any environment?

Then m+p international's VibPilot should be your first choice.

Benefit from the affordable excellence of the VibPilot:

- 4 or 8 analog input channels - expandable
- 102.4 kHz simultaneous sampling
- ICP sensor conditioning
- TEDS support
- 2 source output channels
- Safety shutdown for source channels
- 2 tacho inputs
- 8 digital inputs and 8 digital outputs
- DSP powered real-time processing
- Multiple VibPilot synchronisation
- USB 2.0 host interface
- Compact, dust-proof, rugged housing
- Fan-less, noise-free operation
- AC/DC supply, only 20 W power consumption

VibPilot is delivered with 12-months or optionally 24- or 36-months warranty and with a full calibration certificate. For us your system operational reliability is one of the major criteria for promoting sustained and long-cooperation with our customers. We offer return to m+p repair service including an optional guaranteed 24-hours back-to-operate as well as factory re-calibration at m+p international as well as on-site calibration.

To keep you ahead of your competition, VibPilot is designed to put the products you test at the forefront of performance, durability and quality.

Please refer to the VibPilot product information sheet, the SO Analyzer brochure and product information sheets and the VibControl brochure and product information sheets for detailed specifications.

VibControl and VibPilot are products of m+p international.

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