

PPV901 Seismograph

The PPV901 is a battery powered portable vibration monitor, purpose designed for measuring blasting, piling, demolition, construction and traffic vibrations. It can also measure air overpressure from blasting using the optional microphone.

Battery life is up to 3 weeks for continuous 24 hour monitoring.

Results can be downloaded to a PC, where they can be analysed printed and saved using the software supplied. The PPV901 Seismograph is also available as a twin channel transducer instrument, enabling measurements on a common time base in two places at once.



Options:

- Second Tri-Axial Geophone Pack
- Two stage audible and visible alarm
- Solar panel
- Modem
- Portable Printer
- Vibration Dose Value Transducer

- Impulse mode for blast monitoring
- Continuous mode for piling, rail and road traffic monitoring
- Tri-axial geophone sensor - Option for second tri-axial sensor

Features:

- triggering from 0.1 mm/s
- single range from 0.1 mm/s to 200 mm/s
- auto record length from 2 to 18 seconds (in impulse mode)
- Can trigger and record PPV, acceleration or displacement parameters
- Air overpressure from 100 to 140 dB Linear Peak
- Memory for about 300 events or 30 days continuous recording
- Battery operated, uses 2 Alkaline 'D' cells (or external 12 volt supply)
- Built in timer function
- Instant readout and review of memory event results on LCD
- Download to PC with supplied RS232 cable and Windows™ based software



Technical Specifications

Number of channels	4 (optional 7)
A/D conversion	1 millisecond each channel
A/D resolution	10 bit to 13mm/S then 10 bit to 200mm/S
Resolution	0.012mm/S to 13mm/S then 0.2mm/S
Transducer	3 component geophone pack
Natural Frequency	4Hz
Length of extension cable	up to 1000metres
Seismograph power	2 number D cells (Alkaline battery)
Battery life	30 days continuous monitoring
External power	12V DC
Memory	Non volatile
Memory size	about 300 short trigger events or 30 days Continuous or any combination of these
Communications port	RS232
Communications protocol	8 bit no parity 9600 baud
Measurement parameters	Peak particle velocity (mm/S) Acceleration (g) Displacement (mm) Air Overpressure (dB)
Instrument protection	IP65
Transducer protection	IP67
Conformity	CE
Environmental	IEC 68-2
EMC compliance	EN 61010, EN50 081, EN 50, 082
Weight of instrument	4Kg



To the Safety, Health and Environment Professional...

The issues faced every day by Health, Safety and Environmental professionals are vast and varied. At Castle, we have spent a lot of time developing products and services to make your life easier!

Castle Group Ltd are one of the leading international group specialists in technical safety, health and environment solutions. Whether you are in Industry, Construction, Local Authority or anywhere there are safety or environment issues, we are a resource you really could use. We can help with Noise, Vibration, Air sampling, Gas detection, Light and temperature and just about anything else that needs measuring. The following services show you how we can help

FREE Health & Safety Training Seminars!

To get you off the ground, refresh your knowledge or just to get a taste, Castle is continually running FREE Safety, Health and Environmental seminars around the country. Covering subjects from Noise at Work, to COSHH and Audiometry, the list is ever growing, as are the locations. Check out our web site for the next seminar near you.



www.castlegroup.co.uk

Castle Instruments

Dealing with many Safety, Health and Environmental issues may well mean you need access to a plethora of **equipment** and **instrumentation** to carry out measurements and assessments necessary for the job.

At Castle we can provide you with just about any of the equipment you might need. All our equipment comes with the **guarantee** of back-up and support you only get from a company with 40 years under its belt! Here are a few of the core products we can offer, but we can also source anything you may need!

Noise and Vibration Measurement Equipment
Audiometers, Otoposcopes and Booths
Air-Sampling Pumps, Calibrators and Consumables
Gas-Detection and Personal Monitors
Emissions and Air Quality
Light, Temperature, Humidity and Airflow

www.castlegroup.co.uk



Castle Training Academy

Training is becoming an ever more important area of consideration to industry **professionals** and the Castle Training Academy is fulfilling the need for more and more companies every year. The Academy now offers **competence** training along with IOSH and CIEH **qualifications**. What is more, look out for our NEW City & Guilds provision. All courses come with professional **CPD** points and many are eligible for CITB and Train to Gain **grant funding**.



You can see a full list of courses and book-online on our website.

www.castletrainingacademy.com.

CastleRent

There are a number of **reasons** why rental may be the solution for you. You may only have a one-off use, a special contract, a limited budget or a need for supplementary products. In any case, our **flexible booking** system, next day a.m. delivery and open-pricing mean that you can address any of these issues without delay. For long-term contracts, such as construction projects, Castle Rent is also a **tax efficient** way to 'own' equipment. Finally, for peace of mind, what better way is there to try a product before deciding to buy it? We even give you money back if you do purchase!

The Advantages of Castle Rent;

- Easier on cash-flow
- Rent for long- or short-term as you need it
- Let the Tax Man pay for you!
- Try before you buy
- Four weeks for the price of three
- No on-going maintenance costs
- Sourcing service for any other equipment you need

www.castle-rent.com

Castle Care

Measurement instrumentation must be **regularly** calibrated to a traceable standard and this is certainly true for most health, Safety and Environmental monitoring equipment. At Castle, our team of **highly trained and experienced** technical staff can service and calibrate almost any type of monitoring equipment from Noise and Vibration meters to Thermometers to Scales. The Castle '**Premier Service**' includes menu pricing and a normal turnaround time within 5 days. What is more, we will evaluate any instrument and return it for **FREE** if you do not want to proceed.



Castle premier service and calibration offers...

- Free Evaluation Service
- Clear and Simple Pricing
- UKAS Accreditation Available
- Large range of equipment calibrated
- 4 Levels of calibration available for most equipment
- Annual contract calibrations with up to 20% off

www.castle-care.com

Castle Contracts

For companies with **multiple** pieces of **equipment**, there is also Castle's 'Contract Calibrations'; an annual scheme to take the hassle out of maintaining equipment certification. Castle will issue calibration **reminders**, collect your equipment if required and return it calibrated as soon as possible. This scheme also affords a **saving** of up to 20% on annual calibration charges.

www.castle-care.com

Castle Consultancy

Castle **experts** are waiting to help you. Because we have a **network** of consultants across the country, we are poised to **react** to your requirement. Not only can we normally provide a local service, but we can usually help right away if you need us to!

Whether you are limited for time, in need of further **expertise** or just want some **advice**, we can assist. We have provided a wide range of services to many top companies for projects large and small.

Here are some of the services we can provide, but if it's not here, just ask!

- Noise or Vibration risk assessments
- Building Acoustics
- COSHH compliance
- Environmental Impact Assessments
- Air Quality Monitoring
- Occupational Health Screening programmes

www.castle-consultancy.com

Castle Online

You can access all our products and services online whenever you want, just go to www.castlegroup.co.uk and you will find a **knowledgebase** packed full of useful facts and information. You will also find details of all our upcoming **FREE seminars** and training courses as well as product information on literally hundreds of health, safety and environmental items, which are available to purchase directly through a secure server. Among other things you will find:

- HS&E Measurement Products
- Books, Standards and Publications
- HS&E CD's DVD's
- Stopwatches and Timers
- Scales and Distance Measurement
- Water Testers

You will also find our shop on ebay of all places - <http://stores.ebay.co.uk/Castle-Group-Safety> or just go onto ebay and type Castle Group Safety in the shops section.

Who are Castle

For 40 years, Castle has been driving forward with product and service innovation. For a number of the early years, the company focussed on the development of sound and vibration measuring equipment. This was then progressed by adding training courses, rental and consultancy eventually leading to the Castle of today, which is helping many customers deal with a vast range of health, safety and environmental issues in a variety of ways. The future is a very exciting place at Castle and we are working on many new initiatives with our customers firmly in mind!



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