





Innovation & Technology Driven The

Advanced Digital MEMS Technology















Traditional Pendulum/Vial methods







Products tested by TÜV SÜD, SGS accredited body to comply with CE, FCC & RoHS, and traceable to UKAS, JIS, NIST & DIN, and manufactured under SGS certified ISO quality standards:













DWL3000XY and DWL3500XY is a 2-Axis High Precision Digital Level & Machinist Level with built-in Vibrometer. These digital levels are embedded with advanced MEMS sensor technology, designed for professional & trade specialist to achieve high accuracy and simultaneous display of angular & vibration measurements. DWL2000XY is an affordable model introduced with basic features.

These digital levels are capable of remote real-time data acquisition, logging & analysis when in sync with PC. It is highly effective when used for installation, setting up and maintenance of high precision CNC machines, test and measuring equipment.

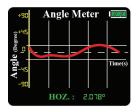
Device Overview

- 2-Axis colour graphic display of angular & vibration measurements
- Real-time digital & analogue display for data logging & analysis
- High resolution of $0.01^{\circ}(175 \,\mu\text{m/M})$ or $0.001^{\circ}(18 \,\mu\text{m/M})$ (3.6 arcsec.)
- Built-in Vibrometer for real-time vibration measurement.
- Wireless/USB connectivity for remote data logging & analysis.

Device TFT LCD Displays









Device Features & Icons



ANGLE METER

Real-time colour graphic display for Single/Dual Axis digital & analogue angle measurements & data acquisition, logging on device screen/PC monitor.



VIBRO METER

Real-time colour graphic display for vibration measurement and data logging on device screen/PC monitor.



ALTERNATE ZERO SETTING

Enable user to measure relative angles at a common plane with respect to a reference angle set to zero.



ABSOLUTE LEVEL SETTING

Enables user to perform absolute symmetry readings for both "front" & "reverse" (180 degrees) positions of any measurement angle.



SETTING MENU

Enable User to define various parameters on the device functions.



WIRELESS SYNC (Optional)

Wireless Sync to computer/tablet/smartphone for remote measurement, data acquisition, logging & analysis.



TEMPERATURE COMPENSATED

These instrument/device are temperature calibrated for the entire specified operating temperature range.



3-Points Contact Base

























PC Sync Software / Android Apps Sync

DUAL AXIS ANGLE GRAPH

VIBROMETER









Bluetooth Connectivity **Smartphone / Tablet**

Software Features

- User-Friendly "Plug & Play" USB Connection for angle & vibration remote measurement, data acquisition, logging & analysis in computer.
- Bluetooth Connectivity (Optional) for wireless remote data acquisition, monitoring & logging.
- Mobile Android Apps "Digi-Pas Level Sync" in Android Tablet and Smartphone.

Advantages of *2-Axis* Digital Level

SPEED & PRECISION

Instant 2-Axis simultaneous digital display of high resolution & accuracy providing a comprehensive solution for levelling, alignment & vibration measurements resulting in time saving and quality professional works.

CLARITY

Digital colour graphic & numeric display to enable real-time collection & storage of digital angle/levelling/alignment data for machine commissioning accountability & analysis.

EFFECTIVE

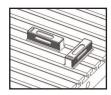
The remote reading Wireless/USB Cable capability via PC/Tablet/Smartphone providing advantages that traditional single axis spirit level is difficult or unable to match. i.e. effectively, only one person is required to level/align a machine.

ACCREDITATION

Instrument accuracy is verified by accredited 3rd party Calibration & Test Service Providers in USA, Japan, UK & Germany and traceable to NIST, JIS, UKAS & DIN under ILAC & A2LA.



Digi-Pas® 2-Axis levelling Utilizing Advanced Digital MEMS Technology



Traditional single axis levelling method (Vial bubble)

























TECHNICAL SPECIFICATION:

| Model | DWL2000XY | DWL3000XY | DWL3500XY |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement Range (Single Axis Mode) | 0.00° to $\pm 90.00^{\circ}$ | $0.00^{\circ} \text{ to } \pm 90.00^{\circ}$ | 0.000° to $\pm 20.000^{\circ}$ |
| Measurement Range (Dual Axis Mode) | 0.00° to ± 3.00° | 0.00° to ± 15.00° | 0.000° to $\pm 10.000^{\circ}$ |
| Resolution | 0.01° (175μm/M) (0.002 in/Ft) | 0.01° (175μm/M) (0.002 in/Ft) | 0.001° (18μm/M) (0.0002 in/Ft) |
| Accuracy | $\pm 0.02^{\circ}$ at $0.00^{\circ} \sim \pm 2.00^{\circ}$ (349 µm/m) (0.004 in/Ft) (72 arcsec.) $\pm 0.04^{\circ}$ at other angles | ± 0.01° at 0.00° ~ ± 10.00° (175μm/M) (0.002 in/Ft) (36 arcsec.) ± 0.03° at other angles | $\pm 0.001^{\circ}$ at $0.000^{\circ} \sim \pm 2.000^{\circ}$ (18µm/M) (0.0002 in/Ft) (3.6 arcsec.) $\pm 0.003^{\circ}$ at other angles |
| Repeatability | 0.01° (175μm/M) (0.002 in/Ft) | 0.01° (175μm/M) (0.002 in/Ft) | 0.001° (18µm/M) (0.0002 in/Ft) |
| Measurement Speed | ≤3 Sec. | ≤3 Sec. | ≤ 5 Sec. |
| Vibrometer (Relative g) | - | 1.0 | 2.0 |
| Magnet | No | Yes | No |
| Display | Colour TFT LCD | | |
| Power Supply* | 4 x AAA 1.5V Batteries / USB | | |
| Material | PC ABS / Aluminium | | PC ABS / Cast Iron |
| Connectivity | USB 2.0 Cable (≤ 5 Meter) | USB 2.0 Cable (≤ 5 metre) Bluetooth Industrial Class 1 (≤30 metre) (Optional) | |
| PC SYNC Software | Professional Edition (Optional) | Basic Edition (Included) Professional Edition (Optional) | Basic Edition (Included) Professional Edition (Optional) |
| Operating Temperature | -10°C to +50°C (Calibrated for the entire temperature range) | | |
| Storage Temperature | -20°C to +60°C | | |
| Dimension (mm) | 188 x 62 x 37 | | |
| Nett Weight (Approximate) | 580 gram | | 1100 gram |
| User Self Calibration | Yes | | |
| Note: * Alternative device power can be obtained from External USB Power Source | | | |

Applications:





CNC Machine Alignment



CMM Levelling (Metrology)



Research Laboratory



Production Machines





Transportation System

www.digipas.com





www.digipas.com

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