

# DIGITAL PROTRACTOR DP-10XY SERIES



HOW TO MOVE

This two-axis digital inclinometer takes measurements in X and Y direction at same time. With 0 cal., 1/2 cal. features, can also be used as a level.



Output from sensors can also be displayed or recorded on PC with dedicated software

### USE

- Surface plate and machine tool angle of inclination measurement

### MATERIAL

- Case: Aluminum
- Base: Aluminum alloy

### FEATURES

- Simultaneously measures angle of inclination in X and Y directions making leveling tasks easier
- Display is switchable to show only X, only Y, or XY measurements
- 0-cal. and 1/2 cal. switches allow calibration at the touch of a button.
- In sensor mode, the measurement range is  $\pm 9.998^\circ$  with minimum reading of  $0.002^\circ$  (0-cal. and 1/2 cal. can not be used in this mode). Measured value on angle sensor (built-in) is to be output and shown on PC.
- Back-light display
- Output from sensors can also be displayed and recorded on PC with dedicated software
- Custom-made base can be attached to the threaded screw holes (M5 × P0.8) at the bottom base

### SPECIFICATIONS

Measuring Range	$\pm 9.99^\circ$
Minimum Reading	$0.01^\circ$
Operating Temperature	0 ~ 40°C
Accuracy	$\pm 0.01^\circ$ (for measuring range less than $\pm 2^\circ$ ) $\pm 0.05^\circ$ (for measuring range greater than $\pm 2^\circ$ )
Repeatability	$\pm 0.01^\circ$
XY Orthogonal Accuracy	1%
Response Time (measurement period)	Approx. 2.5s
Output Signal	Conforms to RS-232C*1
Power	AA battery 2pcs AC Adapter (DC3V output · AC100V ~ 240V)
Run Time (continuous use)*2	Alkaline cells: Approx. 10 hrs.
Dimensions	L88 × W85 × H73mm
Accessories	<ul style="list-style-type: none"> <li>● AC adapter (DC3V output · AC100V ~ 240V)</li> <li>● AA cells 2pcs</li> <li>● Shock resistant aluminum case</li> <li>● PC connection cable DL-P6</li> <li>● Angle calculation software</li> <li>● Warranty · Instruction manual · Inspection report</li> </ul>

\*1: PC without D-USB pin port (RS-232C) requires USB serial transmitter (optional)

\*2: It may vary depending on measuring condition

Order No.	Model No.	Software language	Weight
010093	DP-10XY	Japanese	560g
010086	DP-10XY-E	English	560g

## DIGITAL PROTRACTOR DP-10S • 10D SET SERIES



HOW TO MOVE

Wireless 2-axis digital angle gauge with remote display set.  
Capable of simultaneous X and Y measurements.

### SPECIFICATIONS

Model	Sensor: DP-10S    Display: DP-10D
Measuring Range	± 9.99°
Minimum Reading	0.01°
Operating Temperature	0 ~ 40°C
Accuracy	± 0.01° (for measuring range less than ± 2°) ± 0.05° (for measuring range greater than ± 2°)
Wireless	Bluetooth Class 1*1
Communication Range	30 ~ 50m
Repeatability	± 0.01°
XY Orthogonal Accuracy	1%
Response Time (measurement period)	Approx. 2.5s
Output Signal	Conforms to RS-232C (DP-10D)*2
Power	2 x AA battery each / AC Adapter (DC3V output • AC100V ~ 240V) included
Run Time (continuous use) Alkaline cells	DP-10S: Approx. 10 hrs. (communicating) Approx 4 hrs. (waiting to communicate) DP-10D: Approx. 10 hrs.
Dimensions	DP-10S: L85 x W85 x H73mm DP-10D: L145 x W76 x H30mm
Weight (Including battery)	DP-10S: 540g    DP-10D: 230g
Accessories	<ul style="list-style-type: none"> <li>● AC adapter (DC3V output • AC100V ~ 240V) x 2pcs</li> <li>● AA battery x 4pcs    ● Shock resistant aluminum case</li> <li>● PC connection cable DL-P6    ● Angle calculation software</li> <li>● Warranty • Instruction manual • Inspection report</li> </ul>

\*1 : Our Bluetooth system qualification is with TELEC (Japan), FCC (U.S.A), CE (EU), KCC (South Korea)  
\*2 : PC without D-USB pin port (RS-232C) requires USB serial transmitter (optional)

Order No.	Model No.	Software language
010094	DP-10S • 10D/SET	Japanese
010087	DP-10S • 10D/SET-E	English



DP-10S



DP-10D

### USE

- Surface plate and machine tool angle of inclination measurement

### MATERIAL

- DP-10S...Case: Aluminum / Base: Aluminum alloy
- DP-10D...Case: ABS

### FEATURES

- Simultaneously measures angle of inclination in X and Y directions making leveling tasks easier
- Display is switchable to show only X, only Y, or XY measurements
- 0-cal. and 1/2 cal. switches allow calibration at the touch of a button.
- In sensor mode, the measurement range is ±9.998° with minimum reading of 0.002° (0-cal. and 1/2 cal. can not be used in this mode)
- 0-cal. and 1/2 cal. switches allow calibration at the touch of a button.
- In sensor mode, the measurement range is ±9.998° with minimum reading of 0.002° (0-cal. and 1/2 cal. can not be used in this mode).
- Measured value on angle sensor (built-in) is to be output and shown on PC.
- Output from sensors can also be displayed and recorded on PC with dedicated software
- DP-10S has threaded screw holes (M5 x P0.8) at the bottom base for attaching custom-made base to the product

## DIGITAL LEVEL SENSOR DP-10M SERIES

Can be used as built in two-axis sensor for OEM equipment

### USE

- Sensors for measurement and control of angle of inclination in machine tools, construction machinery, structures, etc.

### MATERIAL

- Case: Aluminum

### FEATURES

- Simultaneously measures angle of inclination in X and Y directions
- When power applied, angle of inclination is output via RS-232C signal (power and output connection via terminal block)
- Output from sensors can also be displayed or recorded on PC with dedicated software

### SPECIFICATIONS

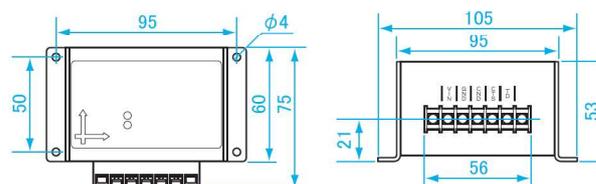
Measuring Range	± 9.998°
Minimum Reading	0.002°
Operating Temperature	0 ~ 40°C
Accuracy	± 0.01° (for measuring range less than ± 2°) ± 0.05° (for measuring range greater than ± 2°)
Repeatability	± 0.01°
XY Orthogonal Accuracy	1%
Response Time (measurement period)	Approx. 2.5s
Output Signal	Conforms to RS-232C*1
Power	DC9 to 15V (approx. 70mA)
Dimensions	L105 x W75 x H53mm
Accessories	<ul style="list-style-type: none"> <li>● Angle calculation software</li> <li>● Warranty • Instruction manual</li> <li>● Spade terminal (Y type) 5 pcs</li> </ul>

\*1 : PC without D-USB pin port (RS-232C) requires USB serial transmitter (optional)



### ● DIMENSIONS

Units: mm



Order No.	Model No.	Software language	Weight
010096	DP-10M	Japanese	270g
010088	DP-10M-E	English	270g

## DIGITAL PROTRACTOR DP-50



Digital angle measurement. High precision measurement & quick measurement time.

### USE

- For angle of tilt measurement

### MATERIAL

- Body: Aluminum

### FEATURES

- Digital inclinometer is useful tool for every site
- Slit encoder ensures accuracy and stability
- Zero setting not required
- Zero setting function
- Display hold function
- Measuring face: V grooved (2 sides)
- Magnetic vertical measuring face
- Display unit: DEG



### SPECIFICATIONS

Measuring Range	± 50°
Minimum Reading	0.1°
Accuracy	± 0.1° (0 ~ 50°)
Repeatability	± 0.1°
Operating Temperature	0 ~ 50°C
Display Units	DEG
Dimensions	L141 × W47 × H109mm (excluding protrusions)
M5 Mounting Holes	Screw hole spacing: 80mm (distance from end to screw hole: 11mm)
Power Source	9V dry cell 1pc
Run Time (continuous use)	Alkaline dry cell: Approx. 15 hrs. ※ May vary depending upon measurement conditions
Accessories	● Soft case ● Warranty · Instruction manual · Inspection report ● 9V dry cell

LEVELNIC

Order No.	Model No.	Weight
010091	DP-50	950g

PRECISION LEVEL

ANGLE

## DIGITAL PROTRACTOR DP-90G



Digital angle measurement. High precision & quick measurement time.

### USE

- For inclination measurement

### MATERIAL

- Body: Aluminum

### FEATURES

- Digital inclinometer with wide range of measurement (90°)
- Display reverses automatically when turned upside down
- Display option: DEG, mm/m, % slope
- Notification tones for 0°, 90° and for 0%, 0mm/m
- With backlight (auto light off after approx. 1 min.)
- Display hold function
- Measuring surface: V grooved, with magnet
- Auto power off function (after approx. 6 min.)



### SPECIFICATIONS

Measuring Range	± 90°
Minimum Reading	Degree display: 0.05° Percent display: 0.1% Gradient: 1mm/m
Accuracy	0.0° ~ 90.0° = ± 0.2°
Operating Temperature	0 ~ 50°C
Display Setting Time	Approx. 10 sec.
Power Source	9V dry cell 1pc
Dimensions	L173 × W47 × H68mm (excluding protrusions)
Accessories	● Soft case ● Warranty · Instruction manual · Inspection report ● 9V dry cell

LEVEL

PROTRACTOR

Order No.	Model No.	Weight
010097	DP-90G	550g

# DIGITAL PROTRACTOR DP-30XY



Two axis -- can measure X and Y directions at the same time.  
Large, color LCD display with touch-panel.

### USE

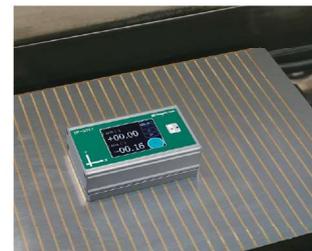
- Digital inclinometer for precision angle measurement and working reference for assemble of machinery, tooling, jigs, etc.

### MATERIAL

- Case: Aluminum
- Base: Aluminum alloy (with magnet)

### FEATURES

- Touch-panel color LCD
- Display unit [° (degree)], [mm/m] switchable
- Auto power off, auto display off function
- Zero position can be set at any angle



### SPECIFICATIONS

Measuring Range	± 30°
Minimum Reading	0.01° (0.1mm/m) switchable
Operating Temperature	0 ~ 40°C
Accuracy	± 0.05° (at 20°C) ※ Temperature dependent factor of 0.015%/°C Example: At 25° C temperature, for measured angle of 12° (25-20) × 12 × 0.015 × 0.01 + 0.05 = 0.059 Readout Accuracy: ± 0.06° (decimal rounded up)
XY Orthogonal Accuracy	1%
Power Supply	Lithium-ion battery
Run Time (continuous use)	Approx. 5 hrs. ※ Slight variation depending on measurement conditions
External Dimensions	Approx. L124 × W75 × H40mm
Accessories	● USB cable (for charging) ● AC adapter (for charging) ● Warranty · Instruction manual · Inspection report

Order No.	Model No.	Weight
010095	DP-30XY	620g

# CONNECTING CABLE



Measured value can be transferred to Microsoft Excel, Memo and other software.  
A set of a PC cable and software for DP-30XY.  
Auto-loading is available at a specific interval (every 0.1 ~ 60min.).



Software (included)

### USE

- To transfer measured value by Levelnic DP-30XY to PC

### FEATURES

- Data transferred on Microsoft Excel, Memo and other software can be edited as you wish
- Transferring value at a specific interval (0.1~60min) is possible

### APPLICABLE OS

- Windows XP, Vista, 7, 8.1, 10

※ If your PC does not have D-SUB9 pin port, please purchase USB-Serial transmitter

Order No.	Model No.	Applicable product	Type of connector on PC	Length of cable
010039	DP-C	DP-30XY	D-SUB9 pin (female) (RS-232C)	Approx. 2m