



110p



111p



112p



112p



113p



114p



114p



115p



115p



116p



116p



117p



117p



118p



119p



120p



121p



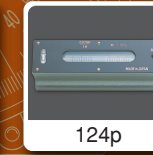
121p



122p



124p



124p



125p

ANGLE



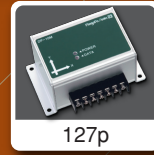
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126p



127p



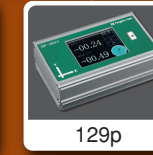
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128p



128p



129p



130p



130p



130p



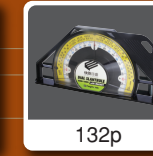
131p



131p



132p



132p



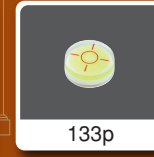
132p



133p



133p



133p



133p



133p



133p



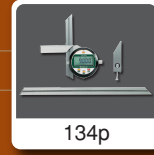
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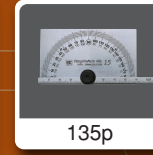
134p



134p



134p



135p



135p



135p



135p



136p



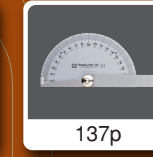
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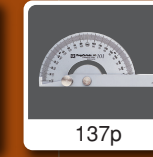
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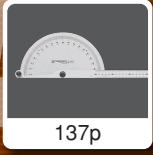
136p



137p



137p



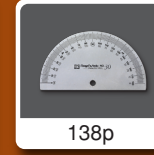
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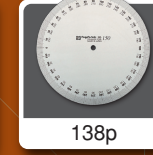
137p



138p



138p



138p

LEVELNIC
PRECISION
LEVEL
ANGLE
LEVEL
PROTRACTOR

Angle Measurement Specifications Summary ※ Refer to the page listed for each item for detailed specifications

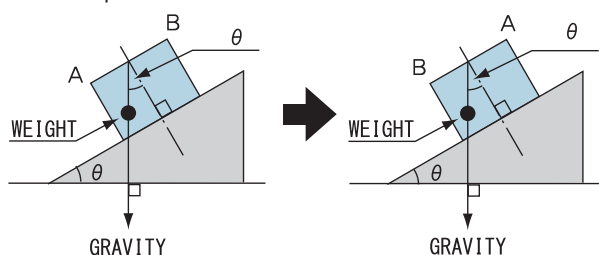
	Product Name	Model No.	Measuring Range	Minimum Reading	Page
DIGITAL LEVEL	LEVELNIC	DL-S4W	± 5.00mm/m · ± 0.286°	0.001mm/m · 0.0001°	110
	LEVELNIC	DL-S3 · DL-S3C · DL-S3L	± 5.00mm/m · ± 0.286°	0.001mm/m · 0.0001°	111 · 112
	LEVELNIC	DL-S2W · DL-S2W (USB)	± 5.000mm/m · ± 0.2865°	0.001mm/m · 0.0001°	113
	LEVELNIC SEPARATE SYSTEM	DL-S2 + DL-D3 + DL-P1	± 5.00mm/m · ± 0.2865°	0.001mm/m · 0.0001°	118
	LEVELNIC	DL-S1	± 9.99mm/m	0.01mm/m	119
	LEVELNIC	DL-m1	± 5.00mm/m	0.01mm/m	114
	LEVELNIC	DL-m3 · DL-m3LS	± 5.00mm/m	0.01mm/m	114 · 115
LEVEL	LEVELNIC	EL-01A	± 0.2mm/m ± 1mm/m ± 2mm/m	0.01mm/m 0.05mm/m 0.1mm/m	120
DIGITAL ANGLE LEVEL	DIGITAL PROTRACTOR	DP-30XY	± 30°	0.01° (0.1mm/m) Switchable	129
	DIGITAL PROTRACTOR	DP-10XY	± 9.99°	0.01° (in sensor mode: 0.002°)	126
	DIGITAL PROTRACTOR	DP-10S · DP-10D SET	± 9.99°	0.01° (in sensor mode: 0.002°)	127
	DIGITAL LEVEL SENSOR	DP-10M	± 9.998°	0.002°	127
	DIGITAL PROTRACTOR	DP-50	± 50°	0.1°	128
	DIGITAL PROTRACTOR	DP-90G	± 90°	1mm/m · 0.05° · 0.1%	128
	BEVEL BOX	BB-180	± 180°	0.1°	130
	BEVEL BOX	BB-180A	± 180°	0.1°	130
	BEVEL BOX	BB-180L	± 180°	0.1°	130
	ANGLE LEVEL	LEVEL METER KAIDAN	LM-90KDS · LM-90KD	0 ~ 90°	1°
DIAL SLANT RULE KAIDAN		DSR-180KD · DSRM-180KD	0 ~ 180°	1°	132
LEVEL MATE		LM-360	0 ~ 360°	1°	131
LEVEL POINT M		LP-360	0 ~ 360°	1°	132
PROTRACTOR	PROTRACTOR No.15	PRT-15	180°	1°	135
	PROTRACTOR No.19 Satin finish	PRT-19	180°	1°	135
	PROTRACTOR No.19 Polished finish	PRT-19S	180°	1°	135
	PROTRACTOR No.19 2 blades	PRT-19SW	180°	1°	135
	PROTRACTOR No.19A	PRT-19A	90°	1°	136
	PROTRACTOR No.19B	PRT-19B	180°	1°	136
	PROTRACTOR No.182	PRT-182S	180°	1°	136
	PROTRACTOR No.183	PRT-183S	180°	1°	136
	PROTRACTOR No.30	PRT-30S	180°	1°	137
	PROTRACTOR No.101	PRT-101S	180°	1°	137
	PROTRACTOR No.300	PRT-300S · PRT-300SW	180°	0.5°	137
	PROTRACTOR No.400	PRT-400S · PRT-400SW	180°	0.5°	137
	PROTRACTOR No.600	PRT-600S · PRT-600SW	180°	0.5°	137
	PROTRACTOR No.1000	PRT-1000S · PRT-1000SW	180°	0.5°	137
	INSIDE PROTRACTOR	IP-90	10° ~ 90°	1°	138
	PROTRACTOR No.192	PRT192-90S · 120S	180°	1°	138
	PROTRACTOR No.192	PRT192-200S · 250S · 300S	180°	0.5°	138
	PROTRACTOR No.193	PRT193-□	360°	1°	138
	DIGITAL PROTRACTOR	DUP-360A	360°	1" · 0.01°	134
	ANGLE GAUGE	ANGLE GAUGE	WGA-65	25 ~ 65° · 70 ~ 110°	0.5° · 1°
ANGLE PROTRACTOR		AP-130	30 ~ 130° · 0 ~ 90° · 0 ~ 180°	1°	97



Levelnic principles of operation

The role of "0 adjustment", and "1/2 adjustment".

Levelnic, like every level, is an instrument which is sensitive to its position relative to earth's gravity. The operation is as follows. We can show how we determine true horizontal using the following method. On a slope, put a board with a weight suspended by a string. The weight will hang at an angle of θ from a line perpendicular to the slope. If the board is rotated 180° , the weight will hang at the same angle θ from a line perpendicular to the slope. Without having an absolute reference, we can determine the angle 2θ by rotating our instrument 180° and measuring the total change in angle relative our perpendicular reference. We can thereby determine θ if we divide by two. Also notice that the angle of the slope relative to true horizontal is also θ . If we set zero with the level on a slope, when we rotate the level 180° the reading will be twice the actual angle of the slope. If we then adjust the slope of the surface being measured (the device under test) until the angle reading is reduced to 1/2 of that value, the surface will be horizontal. Conversely, some desire having an absolute standard only because of confusion or misunderstanding regarding the above process.



※DL-S4W, DL-S3, DL-m1, DL-m3, have a built in computer to allows one touch adjustment using the 0 adjust and 1/2 adjust buttons

Zero point set

Levelnic does not have true horizontal reference built in. When it is turned on, the first number that appears is not necessarily referenced to true horizontal. If you need to reference true horizontal, you will have to set a zero point each time you turn it on. Once the zero point is correctly set, each measurement is properly reference to true horizontal, eliminating any possible errors from the deviation of zero point. To set zero point a "0 adjust" and "1/2 adjust" operation must be performed.

A) To compare slope of different surfaces

- ① Place levelnic on an inclined surface.
 - ② When display stabilizes press "0 adjust" and "0" will be displayed.
- For comparison purposes a zero point has been set which is not true horizontal.

B) If zero point is set to true horizontal.

- ① Place the levelnic on the surface to be adjusted to horizontal.
 - ② Adjust surface until display stabilizes to zero.
- The surface is level.

C) If you are unsure if a surface is horizontal

- ① Place the levelnic on the surface.
 - ② When display stabilizes press "0 adjust" and "0" will be displayed.
 - ③ Rotate the levelnic 180° and put in the same spot.
 - ④ When display stabilizes press "1/2 adjust", and display will be halved.
- Zero is now set to true horizontal.

To set the zero point precisely, there should be minimal slope in the roll direction (perpendicular to the measurement axis), so please set the level in two directions (X, Y) to set zero.

Handling instruction for Levelnic

- Levelnic is a precision instrument. Please handle with care and avoid shock such as bumping or dropping.
- Before use, the levelnic base and the surface to be measured should be wiped clean of any dirt or oil using a paper towel or cloth dampened with ligroin or alcohol.
- There should be no temperature difference between levelnic and surface being measured. In general, precision measurements should be done in a temperature controlled environment.
- After use, the levelnic base should be coated with an anti-rust oil to protect from corrosion.

LEVELNIC DL-S4W NEW!



HOW TO MOVE

The latest model of Levelnic series. Built-in wireless.
Measurement value can be checked both on PC screen and the device's display panel.

- **High accuracy Digital Level**
- Resolution 0.001mm/m**
- Switchable between wired and wireless**



For vertical measurement ▶

L-type Base

P112

For setting a fixed pitch ▶

Levelnic Base with Adjustable Pitch

P121

For flatness and straightness calculation ▶

Levelnic Measurement Software

P122
~123

Rust prevention ▶

Zerust Film for Steel

P322

USE

- High precision leveling of machine tools and surface plates. Straightness and flatness measurement.

MATERIAL

- Body: Aluminum
- Base: Cast Iron

FEATURES

- Wireless data transmission
- PC screen becomes display of Levelnic
- Measurement data can be displayed on PC, using receiver and data display software
- Switchable between wireless/ wired for saving of electricity and long-time use
- USB receiving unit installed. The driver is supported by the automatic recognition system.
- Equipped with two rechargeable batteries, enables running measuring by using a spare battery while the other is being charged
- Custom-made base can be attached to the threaded screw holes (M5 × P0.8) in the bottom of level base (Flat base)

SPECIFICATIONS

Measuring Range*1	± 5.00mm/m ± 0.286°
Minimum Reading	0.001mm/m 0.0001° (within ± 1.999mm/m) 0.01mm/m 0.001° (over ± 2mm/m)
Operating Temperature	0 ~ 40°C
Accuracy*2	Operating temperature 17 ~ 23°C ± 0.85% rdg (within ± 1.999mm/m) ± 1.0% rdg (over ± 2mm/m) Operating temperature 0 ~ 40°C ± 2.6% rdg (within ± 1.999mm/m) ± 2.7% rdg (over ± 2mm/m)
Repeatability	Within ± 0.005mm/m ± 0.0003°
Output Signal	Conforms to RS-232C, wired, built-in wireless system (Bluetooth Class1, wireless range: 30 ~ 50m)
Power Source	9V dry cell, 1pc 8.4V 006P type rechargeable battery 1pc AC adapter (DC9V output · 240V) included
Run time (continuous use) *3	Zinc-carbon Cell: approx. 12 hrs. (Wireless use 3 hrs.) Alkaline Cell: approx. 30 hrs. (Wireless use 3 hrs.) Rechargeable battery 10 hrs. (Wireless use 4 hrs.)
Dimensions	L158 × W61 × H107mm (Base dimensions: L150 × W55mm)
Accessories	● Shock resistant aluminum case ● Warranty · Instruction manual · Inspection report ● AC adapter (DC9V output · AC100V ~ 240V) ● 8.4V 006P type rechargeable battery 2pcs ● Battery charger ● Dedicated display software ● USB receiving unit

* 1 : For DEG (°) Display mode, "0 (Zero)" before the decimal point is not displayed.
For 0.001mm/m (0.0001°) display mode, maximum reading which can be displayed is less than ± 1.999mm/m (± 0.1145°)
* 2 : % rdg indicates the percentage of displayed value
* 3 : May vary depending upon measurement conditions

Order No.	Model No.	Weight
NEW! 010053	DL-S4W	2.0kg

LEVELNIC DL-S3/DL-S3C

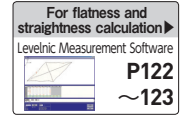
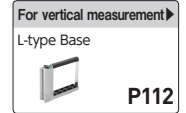


HOW TO MOVE

High accuracy Level with Simple & Clear Operation.
Worlds first Digital Level with built-in Microcomputer.

■ Rechargeable Battery (DL-S3C)

■ Digital Display 0.001mm/m



USE

- High precision leveling of machine tools and surface plates. Straightness, flatness, and vertical measurement.

MATERIAL

- Body: Aluminum
- Base: Cast Iron

FEATURES

- Easy to fix the datum point, divide measurement value into halves with one-touch operation (With "0" cal. switch, 1/2 cal. switch)
- Measurement value can be output with RS232 signal
- Custom-made base can be attached to the threaded screw holes in the bottom base (M5×P0.8) in the bottom of Level base (Flat base)
- DL-S3C is rechargeable type. It can be charged when not in use.

SPECIFICATIONS

Model No.	DL-S3	DL-S3C
Measuring Range*1	± 5.00mm/m · ± 0.286°	
Minimum Reading	0.001mm/m · 0.0001° (0 ~ ± 2mm/m · 0 ~ ± 0.115°) 0.01mm/m · 0.001°	
Operating Temperature	0 ~ 40°C	
Accuracy *2	Operating temperature 17 ~ 23°C ± 0.85% rdg (0 ~ ± 2mm/m · 0 ~ ± 0.115°) ± 1.0% rdg (± 2 ~ ± 5mm/m · ± 0.115° ~ ± 0.286°) Operating temperature 0 ~ 40°C ± 2.6% rdg (0 ~ ± 2mm/m · 0 ~ ± 0.115°) ± 2.7% rdg (± 2 ~ ± 5mm/m · ± 0.115° ~ ± 0.286°)	
Repeatability	within ± 0.005mm/m · ± 0.0003°	
Output Signal	Conforms to RS-232C	
Charging time	—	12hours (when fully charged)
Power Source	9V dry cell, 1 pc AC adapter (100V ~ 240V)	Ni-MH rechargeable 8.4 nominal voltage, 200mAh
Run time (continuous use) *3	Zinc-carbon Cell: approx. 10 hrs. Alkaline Cell: approx. 20 hrs.	12hour charge... approx. 9hrs. 8hour charge... approx. 6hrs. 4hour charge... approx. 2hrs.
Dimensions	L172 × W65 × H129mm (Base dimension: L150 × W55mm)	
Accessories	<ul style="list-style-type: none"> ● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● AC adapter (DC9V output, AC100V ~ 240V) ● 9V dry cell 	<ul style="list-style-type: none"> ● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● AC adapter (DC15V output) ● 8.4V 006P type rechargeable battery

* 1 : For DEG (°) Display mode, "0 (Zero) " before the decimal point is not displayed.

For 0.001mm/m (0.0001°) display mode, maximum reading which can be displayed is less than ± 1.999mm/m (± 0.1145°)

* 2 : % rdg indicates the percentage of displayed value

* 3 : May vary depending upon measurement conditions

Order No.	Model No.	Weight
010013	DL-S3	2.2kg
010030	DL-S3C	2.2kg

■ With V Groove (available on request)

Model	DL-S3V
Tolerance	Within 0.1mm/m (On condition that the bubble in the sub-bubble tube is within the base line)
Tolerance Between Flat and V Groove	Within 0.05mm/m
Angle of V Groove	130° (for cylindrical objects up to φ 65mm)



LEVELNIC

PRECISION
LEVEL

ANGLE

LEVEL

PROTRA
CTOR

LEVELNIC DL-S3L



HOW TO MOVE

For flatness and straightness calculation
 Levelnic Measurement Software
P122
 ~123

LEVELNIC DL-S3 with magnetic L-type base.
 Magnetic base enables Z-axis measurement in addition to X-axis and Y-axis.



USE

- High precision leveling of machine tools and surface plates.
 Straightness, flatness, and vertical measurement.

MATERIAL

- DL-S3 / Body: Aluminum, Base: Cast Iron
- L-type base: Cast Iron

FEATURES

- Quick display of the measured value
- Measurement value can be output with RS-232 signal
- L-type magnetic base enables vertical (Z-axis) measurement
- With 130°V groove

POWER

- 9V dry cell (1 pc)
- AC adapter(100V~240V) included

ACCESSORIES

- Shock resistant aluminum case
- Warranty, instruction manual, inspection report
- AC adapter (DC9V output, AC100V~240V)
- 9V dry cell

Refer to DL-S3 for detailed specifications for this unit

Order No.	Model No.	Base Squareness (mm)	Weight
010027	DL-S3L	within ± 0.04	5.5kg

LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

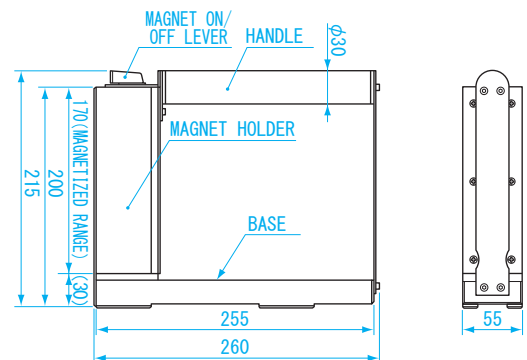
L-TYPE BASE FOR LEVELNIC DL-SL

LEVELNIC DL-S4W, DL-S3(C) or DL-S2W, equipped with L-type base enables measurement in the Z-axis in addition to X-axis and Y-axis



● DIMENSIONS

Units: mm



MATERIAL

- Cast Iron

FEATURES

- Applicable Levelnic: DL-S4W·DL-S3·DL-S3C·DL-S2W
- LEVELNIC DL-S4W, DL-S3, DL-S3C or DL-S2W, equipped with L-type base enables measurement in the Z-axis in addition to X-axis and Y-axis
- L-type magnetic base enables vertical (Z axis) measurement
- Vertical (Z-axis) measurement is available by mounting on Levelnic
- With 130°V groove

Order No.	Model No.	Base Squareness (mm)	Weight
010028	DL-SL	within ± 0.04	4.9kg



HOW TO MOVE

Wireless Data transmission. Same specification as DL-S3, and wireless system equipped.
The maximum longitudinal coverage is 50 ~ 100m.

**High accuracy Digital Level
(Wireless by Bluetooth)
Resolution 0.001mm/m**



<p>For vertical measurement▶ L-type Base P112</p>	<p>For setting a fixed pitch▶ Levelnic Base with Adjustable Pitch P121</p>
<p>For flatness and straightness calculation▶ Levelnic Measurement Software P122 ~123</p>	<p>Rust prevention▶ Zerust Film for Steel P322</p>

USE

- High precision leveling of machine tools and surface plates.
Straightness, flatness, and vertical measurement.

MATERIAL

- Body: Aluminum ● Base: Cast iron

FEATURES

- Wireless data transmission
 - Wireless type Levelnic, useful for leveling and tilt measurement;
 - In overhead location
 - In places where the cable can not reach
 - PC screen becomes display of Levelnic
 - Measurement data can be displayed on PC, using receiver and data display software
 - Custom-made base can be attached to the threaded screw holes (M5×P0.8) in the bottom of Level base (Flat base)
- ※ This model does not have display on the unit. PC or display unit is required for display the measured values.

SPECIFICATIONS

Measuring Range	± 5.000mm/m · ± 0.2865°
Minimum Reading	0.001mm/m · 0.0001°
Operating Temperature	0 ~ 40°C
Accuracy ※	Operating temperature 17 ~ 23°C ± 0.85% rdg (0 ~ ± 2mm/m, 0 ~ ± 0.1146°) ± 1.0% rdg (± 2 ~ ± 5mm/m, ± 0.1146 ~ ± 0.2865°) Operating temperature 0 ~ 40°C ± 2.6% rdg (0 ~ ± 2mm/m, 0 ~ ± 0.1146°) ± 2.7% rdg (± 2 ~ ± 5mm/m, ± 0.1146 ~ ± 0.2865°)
Repeatability	within ± 0.005mm/m · ± 0.0003°
Radio System	Bluetooth Class1
Power Source	9V dry cell, 1 pc (Nominal voltage 8.4V rechargeable battery can also be used) AC Adapter (AC 240V) included
Run time (Continuous use)	Alkaline dry cell: Approx. 10 hrs (Nominal voltage 8.4V rechargeable battery: approx. 3-4 hours) ※ May vary depending upon measurement conditions
Dimensions	L173 × W59 × H147mm (H: up to top of antenna) (Base Dimensions: L150 × W55mm)
Accessories	DL-S2W DL-S2W-E ● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● AC adapter (DC9V output, AC100V ~ 240V) ● 9V dry cell ● Receiving unit ● Power Source cable for wireless unit ● Dedicated display software
	DL-S2W (USB) ● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● AC adapter (DC9V output, AC100V ~ 240V) ● 9V dry cell ● USB receiving unit ● Dedicated display software

※ % rdg indicates percentage of displayed value

Order No.	Model No.	Receiving Unit Type	Language	Weight
010017	DL-S2W	D-SUB9	Japanese	2.1kg
NEW! 010054	DL-S2W (USB)	USB		2.1kg
NEW! 010029	DL-S2W-E	D-SUB9	English	2.1kg



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVELNIC DL-m1



Digital display with 0.01mm/m resolution. Unlike bubble level, there is no delay waiting for reading to settle, reducing human error.

High accuracy Level Digital Display 0.01mm/m



HOW TO MOVE

For vertical measurement ▶
L-type Base
 P114

Rust prevention ▶
Zerust Film for Steel
 P322

USE

- High precision leveling of machine tools and surface plates.
Straightness and flatness measurement.

MATERIAL

- Body: Aluminum ● Base: Cast iron

FEATURES

- Compact, lightweight and simple operation
- Easy to fix the datum point, divide measurement value into half with one touch operation
- Fast output reduces installation time for field work

Order No.	Model No.	Weight
010014	DL-m1	880g

SPECIFICATIONS

Measuring Range	± 5.00mm/m
Minimum Reading	0.01mm/m
Operating Temperature	0 ~ 40°C
Accuracy ※	Operating temperature 17 ~ 23°C ± 0.02mm/m or ± 3% rdg whichever is larger (0 ~ ± 2mm/m) ± 4% rdg (± 2 ~ ± 5mm/m) Operating temperature 0 ~ 40°C ± 0.02mm/m or ± 5% rdg whichever is larger (0 ~ ± 2mm/m) ± 6% rdg (± 2 ~ ± 5mm/m)
Repeatability	within ± 0.01mm/m
Power Source	9V dry cell, 1 pc
Run time (continuous use)	Zinc-carbon cell Approx. 45 hrs, Alkaline cell Approx. 90 hrs. ※ May vary depending upon the measurement conditions
Dimensions	L105 × W50 × H73mm (Base Dimensions: L100 × W50mm)
Accessories	● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● 9V dry cell

※ % rdg indicates the percentage of displayed value

LEVELNIC DL-m3



Digital display with 0.01mm/m resolution. Unlike bubble level, there is no delay waiting for reading to settle, reducing human error.

High accuracy digital level 0.01mm/m, with RC-232C

With data output



HOW TO MOVE

For vertical measurement ▶
L-type Base
 P114

For flatness and straightness calculation ▶
Levelnic Measurement Software
 P122 ~ 123

Rust prevention ▶
Zerust Film for Steel
 P322

USE

- High precision leveling of machine tools and surface plates.
Straightness and flatness measurement.

MATERIAL

- Body: Aluminum ● Base: Cast iron

FEATURES

- Digital display for easy to read measurement
- Compact, light weight and Simple operation
- Equipped with RS-232C output and Softwares for Data Saving, and calculating Flatness, Straightness

Order No.	Model No.	Weight
010015	DL-m3	880g

SPECIFICATIONS

Measuring Range	± 5.00mm/m
Minimum Reading	0.01mm/m
Operating Temperature	0 ~ 40°C
Accuracy ※	Operating temperature 17 ~ 23°C ± 0.02mm/m or ± 3% rdg whichever is larger (0 ~ ± 2mm/m) ± 4% rdg (± 2 ~ ± 5mm/m) Operating temperature 0 ~ 40°C ± 0.02mm/m or ± 5% rdg whichever is larger (0 ~ ± 2mm/m) ± 6% rdg (± 2 ~ ± 5mm/m)
Repeatability	within ± 0.01mm/m
Output Signal	Conforms to RS-232C
Power Source	9V dry cell, 1 pc
Run time (continuous use)	Zinc-carbon cell Approx. 35 hrs, Alkaline cell Approx. 70 hrs. ※ May vary depending upon measurement conditions
Dimensions	L105 × W50 × H73mm (Base Dimensions: L100 × W50mm)
Accessories	● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● 9V dry cell

※ % rdg indicates percentage of displayed value

LEVELNIC DL-m3LS



HOW TO MOVE

Levelnic DL-m3 on L-type Base.
X axis · Y axis and in addition, Z-axis measurements are possible.

For flatness and straightness calculation ▶
Levelnic Measurement Software
P122
~123

Rust prevention ▶
Zerust Film for Steel
P322



※ Base does not have magnetic capability

USE

- High precision leveling of machine tools and surface plates.
Straightness, flatness and vertical measurement.

MATERIAL

- DL-m3 Body: Aluminum, Base: Cast iron
- L type base: Cast iron

FEATURES

- Digital Display
- Small and lightweight
- Equipped with RS-232C output and software for data saving, and calculating flatness, straightness
- L type base allows measurements in the vertical direction
- With 130° V groove

ACCESSORIES

- Shock resistant aluminum case
- Warranty, instruction manual, inspection report
- 9V dry cell

Refer to DL-m3 for detailed specifications for this unit

Order No.	Model No.	Base Squareness (mm)	Weight
010019	DL-m3LS	within ± 0.035	2.8kg



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

L-TYPE BASE FOR LEVELNIC DL-mL

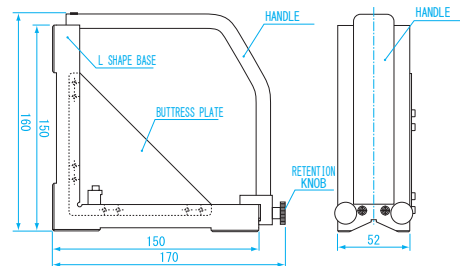
Levelnic DL-m1, m3 mounted on base will be able to take vertical measurements

Rust prevention ▶
Zerust Film for Steel
P322



● DIMENSIONS

Units: mm



※ Base does not have magnetic capability

MATERIAL

- Cast iron

FEATURES

- Applicable Levelnic: DL-m1 · DL-m3
- Levelnic DL-m1, m3 mounted on base will be able to take vertical measurements
- With 130° V groove

Order No.	Model No.	Base Squareness (mm)	Weight
010022	DL-mL	within ± 0.035	1.9kg

TRANSMITTER / DISPLAY SET

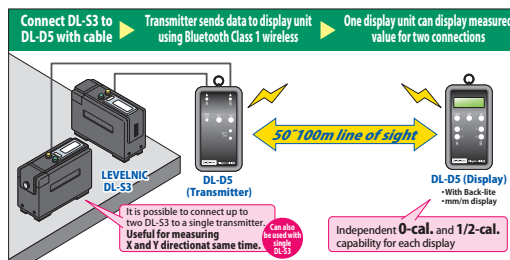
Connects to two DL-S3 at the same time. Receiver can display measurements from X and Y directions.

USE

- Transmit and display measurements for up to two Levelnic DL-S3

FEATURES

- Simultaneous display of two connected DL-S3. Useful for measuring X and Y directions.
- Eases installation of large machine tools by allowing multiple operators to work at same time
- Measured data is more easily visible, especially when used in locations which are remote or have low clearance height
- Since transmitter and receiver are a paired set, there is no need to set up after purchase -- it can be used immediately



SPECIFICATIONS

	Transmitter	Display
Input	Levelnic DL-S3 external signal (×2)	—
Display	—	16 char × 2 lines, character size = 4.9 × 2.5mm, with backlight
Wireless	Bluetooth Class1	
Communication Range	50 ~ 100m line-of-sight (depending on conditions)	
Operating Temperature	0 ~ 40°C	
Power	2 × AA cells (can also use commercially available rechargeable batteries)	
Operating life (continuous use)	communicating with display device: approx. 17 hours attempting communication with display: approx. 3 hours	Alkaline cells: approx. 8 hours
Dimensions	144 × W76 × D27mm (Including lanyard ring) (when mounted in silicone cover: L147 × W81 × D35mm)	
Accessories	2 × connecting cable (approx. 80cm length) 2 × AA cells, Silicone cover.	2 × AA cells, Silicone cover

※ The value of three decimal places digit of the display may show inappropriate number when using DL-m3 ※ 2 Including silicone battery cover

Order No.	Model No.	Compatible Model	Weight
010043	DL-D5	DL-S3 · DL-S3C · DL-S3L · DL-m3 ※ 1	290g each ※ 2

LEVELNIC WIRELESS ADAPTER DL-BW/DL-BW(USB) **NEW!** (DL-BW(USB))

Allows communicating with Levelnic using Bluetooth. Wireless range of 50-100mm line-of-sight.



Shown mounted on DL-S3C

USE

- Wireless adapter for Levelnic

MATERIAL

- Body: Stainless

FEATURES

- The RS232 output signal is transmitted using Bluetooth wireless
- Eliminating cables greatly improves work efficiency

SPECIFICATIONS

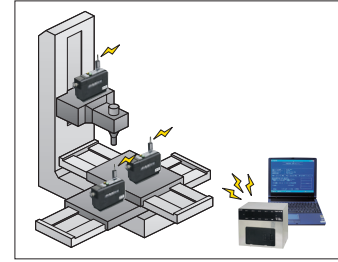
Input	Levelnic RS-232C signals (Levelnic use only)
Wireless	Bluetooth Class1
Power Source	AA battery 6 pcs (rechargeable batteries can be used)
Run time (continuous use)	Alkaline cell: Approx. 70 hrs./ Zinc-carbon cell: Approx. 30 hrs. 1700mAh rechargeable battery: Approx. 45 hrs. ※ May vary depending upon measurement conditions
Dimensions	L143 × W50 × H173mm (Including transmission unit)
Applicable Levelnic	DL-S3, DL-S3C, DL-m3, DL-m3LS, DL-D3, DL-S3L ※ DL-S3, DL-S3C can direct mount

※ A small thermal printer can not be used

Order No.	Model No.	Receiving Unit Type	Weight
010038	DL-BW	D-SUB9	530g
NEW! 010055	DL-BW (USB)	USB	530g

LEVELNIC DATA SYSTEM

Enables data display and saving of up to 8 levelnic with one PC



Example using multiple units with Bluetooth wireless communication

USE

- For data management of multiple Levelnics

MATERIAL

- Body: Stainless steel

FEATURES

- 8 Levelnics can be connected at once
- Data display & recording software included (auto capture function)

Order No.	Model No.	Weight
010037	DL-ADP	1.6kg

SPECIFICATIONS

Input	D-SUB (9 pins, male) RS-232C compliant, 8 inputs (For Levelnic connection only) 1200 Baud, 1 stop bit, No parity, No handshaking
Output	D-SUB (9 pins, male) RS-232C compliant, 1 output (PC connection) 9600 Baud, 1 stop bit, No parity Hardware flow control
Operating Temperature	0 ~ 40°C
Power Source	AC100V adapter [DC9V Output] (Included) AA batteries (1.5V) 6 pcs ※ Run time depends on number of Levelnics
Dimensions	W180 × H150 × D130mm
Applicable Levelnic	DL-S3, DL-S3C, DL-S3L, DL-m3, DL-m3LS, DL-S2W ※ DL-P5AD, DL-P6 can also use cable connection ※ DL-S2W, DL-BW can connect using built-in wireless capability ※ DL-S4W, DL-S2W (USB), DL-BW (USB) cannot be used on this unit



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVELNIC DISPLAY

Can display data at a distance. Enables measurement process to be done by one person. The work of two can be done by one person.



Combination example with DL-S2W

USE

- Levelnic measurement data display

MATERIAL

- Body: Stainless steel

FEATURES

- Can divide measurement value into half with one-touch operation (DL-S2W only)

Order No.	Model No.	Weight
010024	DL-D4	330g

SPECIFICATIONS

Display Range	As per Levelnic spec.
Minimum Reading	As per Levelnic spec.
Operating Temperature	0 ~ 40°C
Input Signal	Conforms to RS-232C (Levelnic digital output signal only)
Power Source	9V dry cell (Nominal voltage 8.4V rechargeable battery can also be used) / AC adapter (included)
Run time (continuous use)	with wireless connection: Alkaline cell: Approx. 5 hrs. with cable connection: Alkaline cell: Approx. 60 hrs. ※ May vary depending upon measurement conditions
Dimensions	L116 × W62 × H48mm
Applicable Levelnic	DL-S3, DL-S3C, DL-S3L, DL-m3, DL-m3LS, DL-S2W ※ DL-P5AD, DL-P6 can also use cable connection ※ DL-S2W, DL-BW can connect using built-in wireless capability ※ DL-S4W, DL-S2W (USB), DL-BW (USB) cannot be used on this unit

SEPARATE SYSTEM/ LEVELNIC CABLE

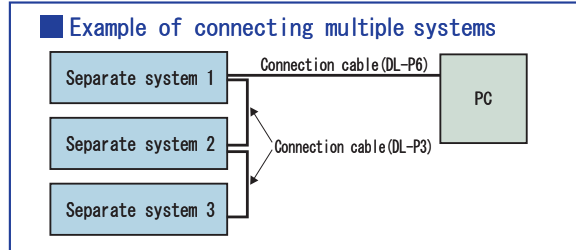


HOW TO MOVE

High accuracy digital Level with output to external display 0.001mm/m



- Digital sensor (DL-S2) • Digital display (DL-D3) • Cable (DL-P1) as combined system
- ※ PC is not included



USE

- High precision leveling of machine tools and surface plates. Straightness and flatness measurement for digital display.

MATERIAL

- Body: Aluminum
- Sensor base: Cast iron

FEATURES

- Display allows machine tool data obtained by Levelnic to be close at hand
- Output data is available on built in RS-232C interface for connection to computer or printer
- Multiple output signals can be combined onto one signal allowing expansion to 2, 3, or 4 devices for easy processing
- Easy to fix the Datum point, divide measurement value into half with one touch operation
- Custom-made base can be attached to the threaded screw holes (M5×P0.8) in the bottom of digital sensor base

SPECIFICATIONS

LEVELNIC	Measuring Range	± 5.000mm/m · ± 0.2865°
PRECISION LEVEL	Minimum Reading	0.001mm/m · 0.0001° 0.01mm/m · 0.001°
ANGLE	Operating Temperature	0 ~ 40°C
LEVEL	Accuracy	Operating temperature 17 ~ 23°C ± 0.85% rdg (0 ~ ± 2mm/m · 0 ~ ± 0.1146°) ± 1.0% rdg (± 2 ~ ± 5mm/m · ± 0.1146 ~ ± 0.2865°) Operating temperature 0 ~ 40°C ± 2.6% rdg (0 ~ ± 2mm/m · 0 ~ ± 0.1146°) ± 2.7% rdg (± 2 ~ ± 5mm/m · ± 0.1146 ~ ± 0.2865°)
PROTRACTOR	Repeatability	within ± 0.005mm/m · ± 0.0003°
	Output Signal	Conforms to RS-232C
	Power Source	AA battery 6 pcs AC adapter (AC 240V) included
	Run time (continuous use)	Zinc-carbon cell: Approx. 27 hrs. Alkaline cell: Approx. 55 hrs. ※ May vary depending upon measurement conditions
	Dimensions	DL-S2 L167 × W59 × H111mm (Base dimension: L150 × W55mm) DL-D3 L235 × W106 × H51mm DL-P1 Length: 5m (standard cable) DL-P3 Length: 4.5m
	Accessories	● Shock resistant aluminum case ● Warranty, instruction manual, inspection report

Order No.	Model No.	Weight
010023	DL-D3	1kg
010012	DL-S2	2kg
010031	DL-P1	400g
010033	DL-P3	100g

PC connection cable

USE

- For connecting Levelnic to PC

SPECIFICATIONS

- Length: φ3×5m
- 9 pins connector (Serial port connection)
- Applicable Levelnic: DL-S4W·DL-m3·DL-S3·DL-m3L·DL-S3L·DL-S3C·Separate system

Order No.	Model No.	Material
010040	DL-P6	2 cond. w/ shield (Cu)

LEVELNIC DL-S1



HOW TO MOVE

Digital display with 0.01mm/m resolution.
 Unlike bubble level, there is no delay waiting for reading to settle, reducing human error.

■ Digital display with 0.01mm/m resolution



USE

- High precision leveling of machine tools and surface plates, Straightness and flatness measurement

MATERIAL

- Body: Aluminum
- Base: Cast iron

FEATURES

- Faster response than bubble level
- Wider range of measurement than conventional level
- Measurement can be taken in difficult to see position by pressing hold switch and then reading

SPECIFICATIONS

Measuring Range	± 9.99mm/m
Minimum Reading	0.01mm/m
Operating Temperature	0 ~ 40°C
Accuracy *1	Operating temperature 17 ~ 23°C ± 1.3% rdg Operating temperature 0 ~ 40°C ± 3.0% rdg
Repeatability	within ± 0.01mm/m
Power Source *2	9V dry cell, 1 pc AC adapter (100V ~ 240V) (Optional)
Run time (continuous use)	Zinc-carbon Cell---Approx. 25 hrs. Alkaline Cell---Approx. 50 hrs. * May vary depending upon measurement conditions
Dimensions	L159 × W78 × H104mm (Base Dimension: L150 × W55mm)
Accessories	● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● 9V dry cell

* 1: % rdg indicates percentage of displayed value.

* 2: AC adapter sold separately

Order No.	Model No.	Weight
010011	DL-S1	2.0kg

■ Also available with special V-groove base

Model	DL-S1V
Rolling Error	Within 0.1mm/m when the bubble of auxiliary bubble tube is centered
Plane and V groove error	Within 0.05mm/m
V groove angle	130° (for cylindrical objects up to φ 65mm)



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVELNIC EL-01A

High-sensitive (0.01mm/m) Pendulum type level with analog output.
Three levels of sensitivity.

■ Analog Display 0.01mm/m



USE

- Leveling of machine tools and surface plates.
Straightness and flatness measurements.

MATERIAL

- Body: Aluminum
- Base: Cast iron

FEATURES

- Quicker response than bubble level
- Sensitivity is switchable in 3 steps
- Connectible directly to commonly-available analog recorder through analog output
- Custom-made base can be attached to the threaded screw holes (M5×P0.8) in the bottom of level base (flat base)
- Pendulum system prevents any hysteresis errors and is not influenced by temperature change

SPECIFICATIONS

Sensitivity	I : 1Division = 0.01mm/m II : 1Division = 0.05mm/m III : 1Division = 0.1mm/m
Measuring Range (3 Range)	± 0.2mm/m (1Division 0.01mm/m) ± 1mm/m (1Division 0.05mm/m) ± 2mm/m (1Division 0.1mm/m)
Operating Temperature	0 ~ 40°C
Pointing Error	within ± 0.5 Division
Repeatability Accuracy	within ± 0.005mm/m
Output Signal	Analog output ± 200mV F.S. (for all range) Connectible load resistance: No less than 100 Ω
Power Source	9V dry cell, 1 pc AC Adapter (included)
Run time (continuous use)	Zinc-carbon Cell: Approx. 25 hrs. Alkaline cell: Approx. 50hrs. ※ May vary depending upon measurement condition
Base Dimension	L150 × W85 × H195mm ※ Excluding Handle (Dimension: L150 × W55mm)
Accessories	● Shock resistant aluminum case ● Warranty, instruction manual, inspection report ● AC adapter (DC9V output, AC100V ~ 240V) ● 9V dry cell

Order No.	Model No.	Weight
010005	EL-01A	2.9kg

■ Connection Cable / EL-K2

USE

- Connects to analog recorder with analog output of EL-01A

SPECIFICATIONS

- Length: φ3×5m ● Recorder: Banana plug
- Levelnic: M3 plug

Order No.	Model No.	Weight
010082	EL-K2	150g

LEVELNIC BASE WITH ADJUSTABLE PITCH

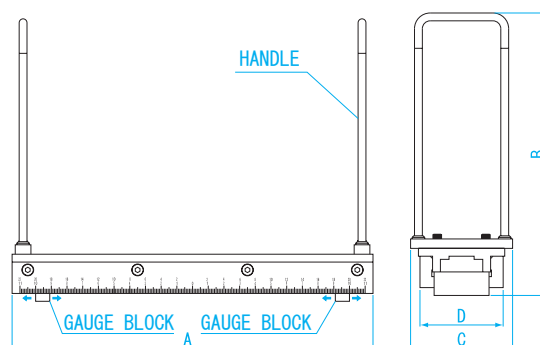
By attaching Levelnic to this base, any desired measurement pitch can be set



LP-300

● DIMENSIONS

Units: mm



USE

- Setting a fixed pitch for straightness and flatness measurements

MATERIAL

- Made of carbon tool steel

FEATURES

- Applicable levelnic: DL-S4W·DL-S2·DL-S3·DL-S3C·DL-S2W·EL-01A
- The base is graduated in mm and enables setting measurement pitch
- Measuring face consists of 2 pcs of 15mm Gauge block

Units: mm

Model No.	A	B	C	D
LP-200	230	180	65	55
LP-300	330	180	65	55

Order No.	Model No.	Measurement pitch range (mm)	Weight
010020	LP-200	50 ~ 200	1.8kg
010021	LP-300	50 ~ 300	2kg

CASE FOR LEVELNIC

Shock resistant aluminum case for Levelnic. Suitable for storage and carrying.



LV-CS3



LV-CM1

USE

- Carrying case for Levelnic
(Levelnic is a precision instrument, we recommend that you use a carrying case)

MATERIAL

- Body: Aluminum
- Inside: Urethane foam

FEATURES

- Applicable levelnic:
LV-CS3: DL-S4W·DL-S1·DL-S2·DL-S2W·DL-S3·DL-S3C
LV-CM1: DL-m1·DL-m3
- Shock protection during transport

Order No.	Model No.	Dimensions (mm)	Weight
010025	LV-CS3	362 × 236 × 184	1.86kg
010026	LV-CM1	250 × 200 × 150	1.15kg

SOFTWARE FOR LEVELNIC

Software for Levelnic.
Simple operation and graphics for easy use and understanding.

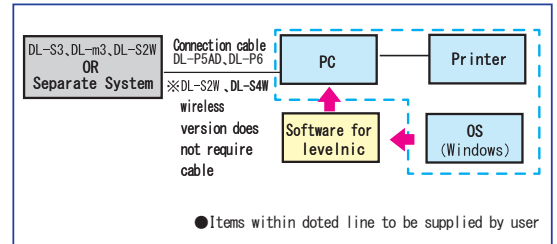
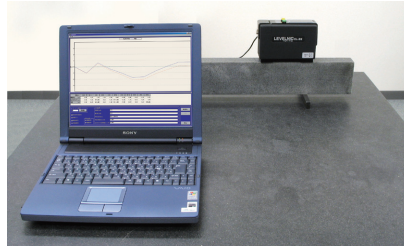
Straightness measurement computer software (ST) Flatness measurement computer software (FL)

- Greatly reduces measurement time by recording the results for straightness and flatness measurements
- For cabled and wireless system
- Supported OS: Windows XP·Vista·7·8
- Direct input from DL-S2+D3, DL-S3, DL-S3C, DL-S3L, DL-m3, DL-m3LS, DL-S2W, DL-S4W, and Separate System

■ Flatness measurement



■ Straightness measurement while connected to PC



■ No need to install the software to PC

Only drag and drop .exe file, and double click to start. Also can be used directly from USB memory.

■ Input selection

Data can be manually typed in from any level, including bubble tube type level

■ Input signal from Levelnic over RS-232C

With computer connected to the Levelnic output, sequential measurements taken at regular intervals can be used to calculate flatness and straightness for display, printing and storage. (saved measurement data can not be revised)

■ Input typed onto keyboard from bubble level for display, calculation and storage

Using a bubble level, and keyboard to enter data, sequential measurement taken at regular intervals can be used for calculation, display and storage

■ Displacement measurements (μm) typed onto keyboard for display, calculation and storage

Measurement of displacement from a reference plane made with a linear gauge or dial indicator at regular intervals can be used in place of an electronic angle gauge (goniometer) and entered into keyboard for calculation, display and storage

LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVELNIC MEASUREMENT SOFTWARE



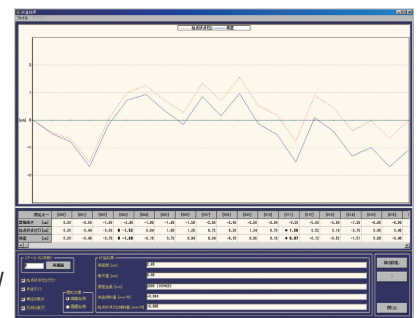
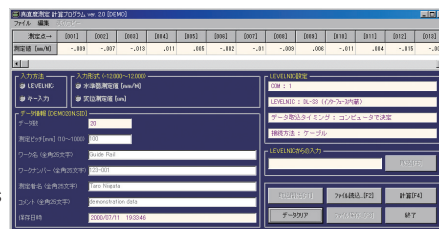
HOW TO MOVE

Use to easily calculate flatness and straightness when connected to Levelnic with cable or wireless connection

Straightness software

● With straightness software Levelnic can easily perform the straightness measurements that once required an autocollimator, and for a lower cost

■ Straightness measurement



USE

● Software to perform straightness calculations

FEATURES

- Both wired and wireless capability
- Model compatibility: DL-S4W·DL-S2+D3·DL-S3·DL-S3C·DL-S3L·DL-m3·DL-m3LS·DL-S2W
- ※Above compatibility applies for direct connection. Data can be manually typed in from any model, including bubble tube type level.

SPECIFICATIONS

● Supports: Windows XP·Vista·7·8

Order No.	Model No.	Language
010066	ST	Japanese
010070	ST-E	English
010073	ST-C	Chinese



HOW TO MOVE

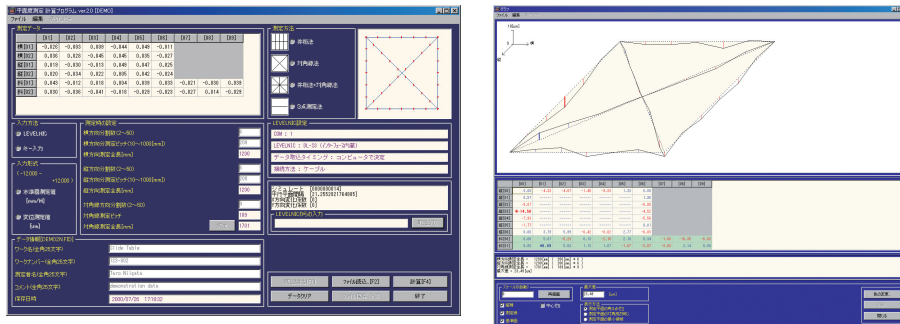
LEVELNIC MEASUREMENT SOFTWARE

Use to easily calculate flatness and straightness when connected to Levelnic with cable or wireless connection

Flatness software

With Flatness software Levelnic can easily perform the flatness measurements that once required an autocollimator, and for a lower cost

Flatness measurement



USE

- Software to perform flatness calculations

FEATURES

- Both wired and wireless capability
- Model compatibility: DL-S4W·DL-S2+D3·DL-S3·DL-S3C·DL-S3L·DL-m3·DL-m3LS·DL-S2W
 - ※Above compatibility applies for direct connection. Data can be manually typed in from any model, including bubble tube type level.

SPECIFICATIONS

- Supports: Windows XP·Vista·7·8

Order No.	Model No.	Language
010065	FL	Japanese
010069	FL-E	English
010072	FL-C	Chinese

Data Record Software

USE

- Records output data from Levelnic

FEATURES

- Levelnic measurements are recorded to text file
- Model compatibility: DL-S4W·DL-S2+D3·DL-S3·DL-S3C·DL-S3L·DL-m3·DL-m3LS·DL-S2W

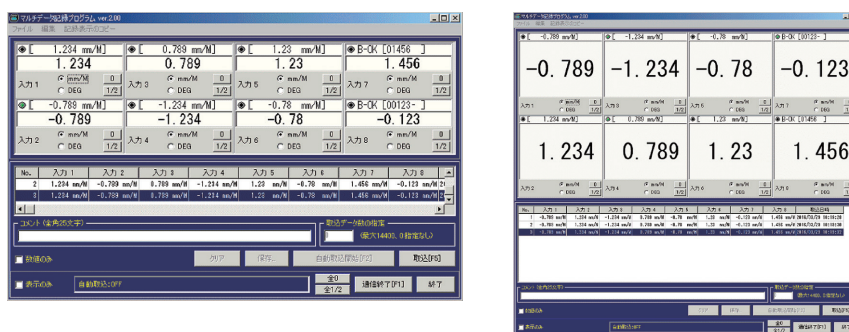
SPECIFICATIONS

- Supports: Windows XP·Vista·7·8

Order No.	Model No.	Language
010067	LEVELOG	Japanese
010068	LEVELOG-E	English

DATA RECORDING SOFTWARE LEVELOG-M **NEW!**

For data management of multiple use of Levelnic. Display and record up to 8 data channels.



USE

- For displaying measurement values on PC screen and loading its data into PC for up to 8 units of Levelnic

FEATURES

- Loadable up to 14,400 data points which can be saved as plain text
- Selectable data loading - Manual loading/ Auto-loading at set time interval
- Model compatibility: DL-S4W, DL-S2W, DL-m3, DL-S3, DL-S3+DL-C1, DL-S2+DL-D3

SPECIFICATIONS

- Supports: Windows XP·Vista·7·8
 - ※Computer requires COM port or USB port for each connected Levelnic

Order No.	Model No.	Language
NEW! 010074	LEVELOG-M	Japanese



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

PRECISION LEVEL (JIS CLASS A)



USE

- Bubble tube indicates horizontal and measures small inclinations
- Precision measurement for machine inspection and leveling

MATERIAL

- Special tool steel body (hardened)

FEATURES

- JIS B7510 standard product
- Special tool steel body (hardened) is lapped and polished

SPECIFICATIONS

- Sensitivity: 0.02mm/m
- Accuracy of the main bubble Full range accuracy: less than ± 0.5 graduation
Adjacent accuracy: less than 0.2 graduation
- Parallelism between V groove and base: within 0.5 graduation
- Parallelism on base: within 0.003mm

Order No.	Model No.	Standard (mm)	Dimensions L x W x H (mm)	Weight
160001	FLA-150002	150	150 x 45 x 49	1.3kg
160002	FLA-200002	200	200 x 48 x 49	1.7kg
160003	FLA-250002	250	250 x 48 x 49	2.3kg
160004	FLA-300002	300	300 x 48 x 49	2.8kg



LEVELNIC

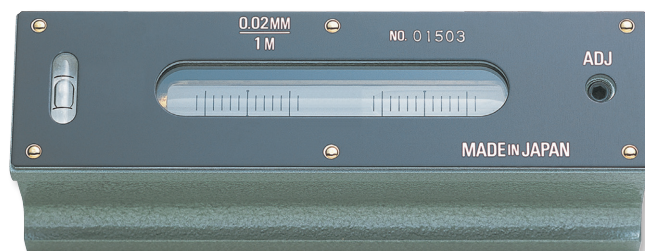
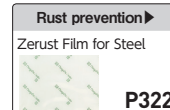
PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

GENERAL PURPOSE PRECISION LEVEL



USE

- Bubble tube indicates horizontal and measures small inclinations
- For machine installation and general mechanical assembly

MATERIAL

- Quality cast iron(FC250)

FEATURES

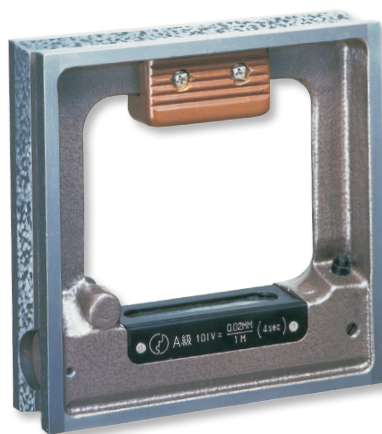
- Quality cast iron(FC250) with perfect seasoning and lapped to a fine finish to maintain precision

SPECIFICATIONS

- Sensitivity: 0.02mm/m
- Accuracy of the main bubble Full range accuracy: less than ± 2 graduation

Order No.	Model No.	Standard (mm)	Dimensions L x W x H (mm)	Weight
160005	FLW-150002	150	150 x 48 x 47	1.3kg
160006	FLW-200002	200	200 x 48 x 47	1.7kg
160007	FLW-250002	250	250 x 48 x 47	2.3kg
160008	FLW-300002	300	300 x 48 x 47	2.8kg

SQUARE PRECISION LEVEL (JIS CLASS A)



USE

- Bubble tube indicates horizontal and measures small inclination
- Precision measurement for machine inspection and leveling

MATERIAL

- Special tool steel body (hardened)

FEATURES

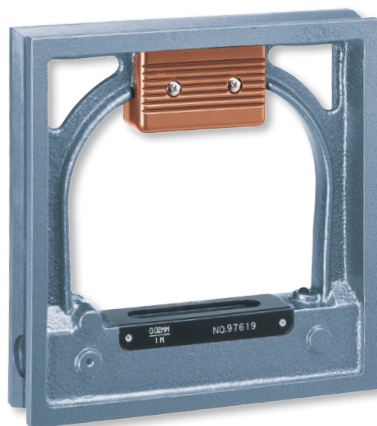
- JIS B7510 standard product
- Special tool steel body (hardened) is lapped and polished

SPECIFICATIONS

- Sensitivity: 0.02mm/m
- Accuracy of the main bubble
 - Full range of the main bubble: less than ± 0.5 graduation
 - Adjacent accuracy: less than 0.2 graduation
- Perpendicularity of sides and bottom: less than 0.015mm/m
- Parallelism of V groove and V groove surface: less than 0.5 graduation
- Parallelism of top and bottom: less than 0.5 graduation
- Flatness of bottom and sides: less than 0.003mm

Order No.	Model No.	Standard (mm)	Dimensions L × W × H (mm)	Weight
160009	SLA-150002	150	150 × 40 × 150	2.1kg
160010	SLA-200002	200	200 × 42 × 200	3.8kg
160011	SLA-250002	250	250 × 50 × 250	5.8kg
160012	SLA-300002	300	300 × 50 × 300	7.5kg

GENERAL PURPOSE SQUARE PRECISION LEVEL



USE

- Bubble tube indicates horizontal and measures small inclinations
- Ideal for machine assembly and general purpose use

MATERIAL

- Quality cast iron(FC250)

FEATURES

- Quality cast iron(FC250) with perfect seasoning and lapped to a fine finish to maintain precision

SPECIFICATIONS

- Sensitivity: 0.02mm/m
- Accuracy of the main bubble Full range accuracy: less than ± 2 graduation

Order No.	Model No.	Standard (mm)	Dimensions L × W × H (mm)	Weight
160013	SLW-150002	150	150 × 42 × 150	2.1kg
160014	SLW-200002	200	200 × 42 × 200	3.8kg
160015	SLW-250002	250	250 × 45 × 250	5.8kg
160016	SLW-300002	300	300 × 45 × 300	7.5kg



LEVELNIC

PRECISION
LEVEL

ANGLE

LEVEL

PROTRA
CTOR

DIGITAL PROTRACTOR DP-10XY



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° (0-cal. and 1/2 cal. can not be used in this mode)
- Built in output for display of sensor reading on PC
- Back-light display
- Output from sensors can also be displayed or recorded on PC with dedicated software

SPECIFICATIONS

Measuring Range	$\pm 9.99^\circ$
Minimum Reading	0.01°
Operating Temperature	$0 \sim 40^\circ\text{C}$
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
Power	AA cells, 2pcs AC Adapter (3V)
Run Time (continuous use)	Alkaline cells approx. 10 hrs. ※ may vary depending on measurement conditions
Dimensions	L88 × W85 × H73mm
Accessories	<ul style="list-style-type: none"> ● AC adapter (3V output) ● AA cells, 2pcs ● Shock resistant aluminum case ● PC connection cable DL-P6 ● Angle calculation software ● Warranty, instruction manual, inspection report

Order No.	Model No.	Weight
010093	DP-10XY	560g

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



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
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)
Power	2 × AA cells each / AC Adapter (3V)
Run Time (continuous use) Alkaline cells	DP-10S: approx. 10 hrs. (communicating) approx 4 hrs. (waiting to communicate) DP-10D: About 10 hrs.
Dimensions	DP-10S : L85 × W85 × H73mm DP-10D : L145 × W76 × H30mm
Weight (Including battery)	DP-10S : 540g DP-10D : 230g
Accessories	<ul style="list-style-type: none"> ● AC adapter (3V output) × 2pcs ● AA cells × 4pcs ● Shock resistant aluminum case ● PC connection cable DL-P6 ● Angle calculation software ● Warranty, instruction manual, inspection report



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)
- 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)
- Built in output for display of sensor reading on PC
- Output from sensors can also be displayed or recorded on PC with dedicated software

Order No.	Model No.
010094	DP-10S • 10D SET

DIGITAL LEVEL SENSOR DP-10M

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

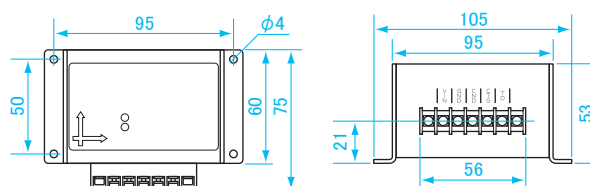
SPECIFICATIONS

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
Power	DC9 to 15V (approx. 70mA)
Dimensions	L105 × W75 × H53mm
Accessories	<ul style="list-style-type: none"> ● Angle calculation software ● Warranty, instruction manual ● Spade terminal (Y type), 5 pcs



● DIMENSIONS

Units: mm



Order No.	Model No.	Weight
010096	DP-10M	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 angle meter 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-groove (2 sides)
- Vertical sides are magnetic
- 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

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

DIGITAL PROTRACTOR DP-90G **NEW!**



Digital angle measurement. High precision & quick measurement time.

USE

- For inclination measurement

MATERIAL

- Body: Aluminum

FEATURES

- 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 1 min.)
- Display hold function
- Measuring surface: V-groove, with magnet
- Auto power off function (after 6 min.)



SPECIFICATIONS

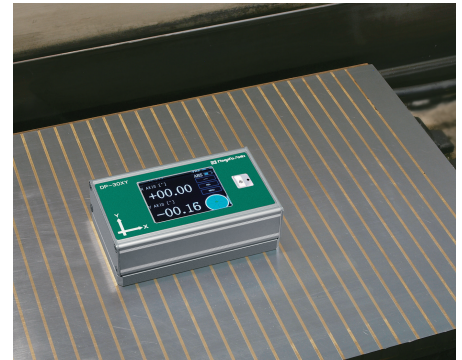
Measuring Range	± 90°
Minimum Reading	Degree display: 0.05° Percent display: 0.1% Gradient: 1mm/m
Accuracy	0.0° ~ 90.0° = ± 0.2°
Operating Temperature	0 ~ 50°C
Display Setting Time	Approx. 10 sec.
Power Source	9V dry cell, 1pc
Dimensions	L173 × W47 × H68mm (Excluding protrusions)
Accessories	● Soft case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

Order No.	Model No.	Weight
NEW! 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.



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

USE

- 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 off, auto display off features
- 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
Readout Accuracy	Readout 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
Continuous Use Time	Approx. 5 hours ※ 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

BEVEL BOX BB-180



Compact design digital angle meter

● DIMENSIONS

Units: mm

USE

- For all processes that require precise angle measurement, such as assembly, molding, machining and fixtures

MATERIAL

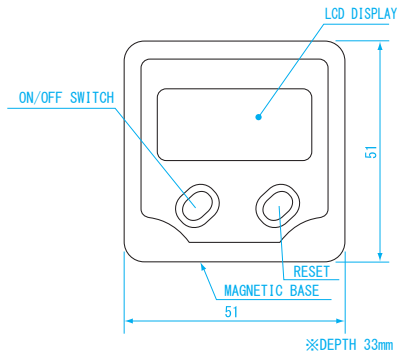
- Aluminum frame, Plastic face/back, magnet on base

FEATURES

- Zero-setting at desired position
- Auto power off function (after 5 min.)

POWER

- One CR2032 (Lithium) battery included for testing



※ Quantization Error (± 1 digit) not included

Order No.	Model No.	Measuring Range	Resolution	Operating Temperature	Accuracy [※]	Repeatability	Weight
010101	BB-180	± 180.0°	0.1°	5 ~ 45°C	± 0.2°	0.1°	120g

BEVEL BOX BB-180A



Compact design digital angle meter

Absolute measurement mode stores true horizontal

● DIMENSIONS

Units: mm

USE

- For all processes that require precise angle measurement, such as assembly, molding, machining and fixtures

MATERIAL

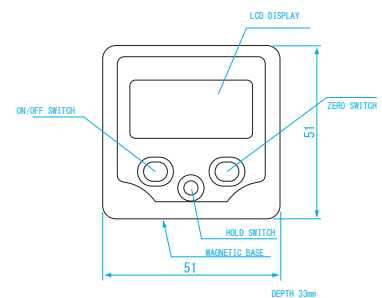
- Body: Aluminum (with magnet on base)

FEATURES

- Zero setting at desired position
- Absolute measurement mode stores true horizontal
- "Hold" button to fix reading on display
- Auto power off function (after 5 min.)

POWER

- One CR2032 (Lithium) battery included for testing



※ Quantization Error (± 1 digit) not included

Order No.	Model No.	Measuring Range	Resolution	Operating Temperature	Accuracy [※]	Repeatability	Weight
010102	BB-180A	± 180.0°	0.1°	5 ~ 45°C	± 0.2°	0.1°	170g

BEVEL BOX BB-180L **NEW!**



Compact design digital angle meter

Large LCD with backlight for easy reading in a dark place

Absolute measurement mode stores true horizontal

● DIMENSIONS

Units: mm

USE

- For all processes that requires precise angle measurement, such as assembly, molding, machining and fixtures

MATERIAL

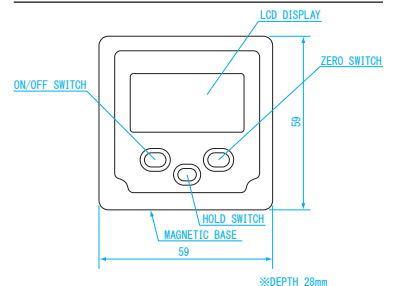
- Body: Aluminum (with magnet on base)

FEATURES

- Zero setting at desired position
- Absolute measurement mode stores true horizontal
- Large LCD with backlight for easy reading in a dark place
- "Hold" button to fix reading on display
- Auto power off function (after 5 min.)

POWER

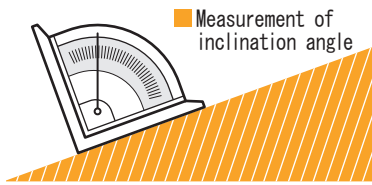
- One (1) AAA size cell battery (NOT included in the package)



※ Quantization Error (± 1 digit) not included

Order No.	Model No.	Measuring Range	Resolution	Operating Temperature	Accuracy [※]	Repeatability	Weight
NEW! 010103	BB-180L	± 180.0°	0.1°	5 ~ 45°	± 0.2°	0.1°	70g

Analog type goniometer with Kaidan reading and magnetic base


USE

- Measurement of inclination angle

MATERIAL

- Body: AS resin ● Cover: Acrylic

FEATURES

- Analog dial easier to read than bubble tube type meter
- Kaidan reading (Increasing height of each mark) enables to distinguish 1mm step difference easily
- Light weight and handy
- With magnetic base

SPECIFICATIONS

- Measurement range: 0~90°
- Graduation: 1°
- Accuracy: ±0.5°

Order No.	Model No.	Product Type	Magnetic Attraction (Reference Value)	Dimensions H × W × T (mm)	Weight
NEW! 011012	LM-90KDS	Strong magnet type	40N	95 × 95 × 30	100g
NEW! 011013	LM-90KD	Regular magnet type	10N	95 × 95 × 30	120g



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVEL MATE

 Analog type goniometer.
 With magnet for vertical surfaces.

USE

- Angle of tilt measurement

MATERIAL

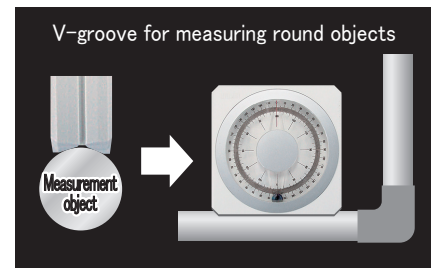
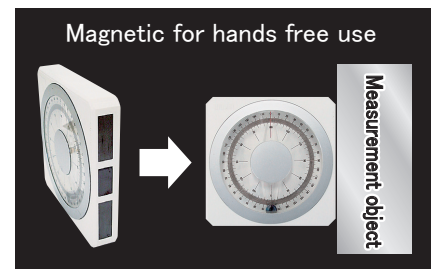
- Plastic

FEATURES

- Setting angles for machine work
- Mechanical assembly, installation
- Miscellaneous plumbing work
- Construction and related work
- V groove on bottom, magnet for vertical surface

SPECIFICATIONS

- Measuring Range: 0~360°
- Minimum Reading: 1°
- Accuracy: ±0.5°



Order No.	Model No.	Dimensions H × W × T (mm)	Weight
011030	LM-360	110 × 110 × 20	140g



DIAL SLANT RULE KAIDAN **NEW!**



Analog dial angle meter with Kaidan reading



DSR-180KD



DSRM-180KD
(with magnet)

USE

- Measurement of inclination angle

MATERIAL

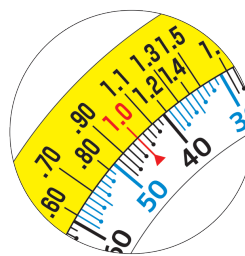
- Body: ABS ● Cover: Styrol

FEATURES

- Analog dial easier to read than bubble tube type meter
- Kaidan reading (Increasing height of each mark) enables to distinguish 1mm step difference easily
- Light weight and handy
- With handle and hook hole

SPECIFICATIONS

- Measuring Range: 0~180° ● Graduation: 1°
- Accuracy: ±0.5°



Dual scales for Angle & Inclination measurement

Order No.	Model No.	Product Type	Magnetic Attraction (Reference Value)	Dimensions L × H × W (mm)	Weight
NEW! 011002	DSR-180KD	-	-	182 × 92 × 20	110g
NEW! 011003	DSRM-180KD	With magnet	8N	182 × 92 × 20	112g



LEVELNIC

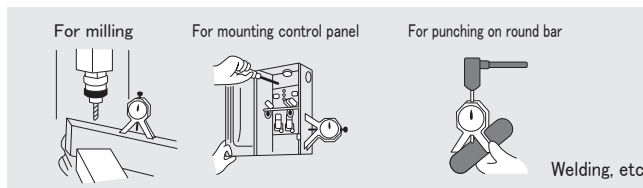
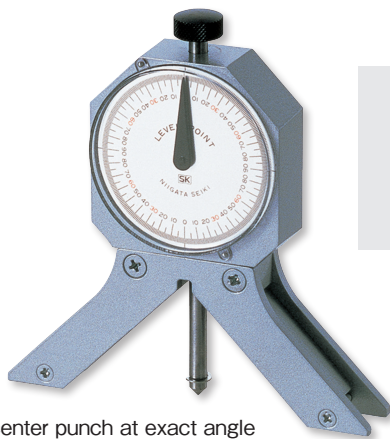
PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

LEVEL POINT GAUGE



USE

- Measure angle of round bar, or center punch at exact angle

MATERIAL

- Body: Aluminum ● Leg: Steel

FEATURES

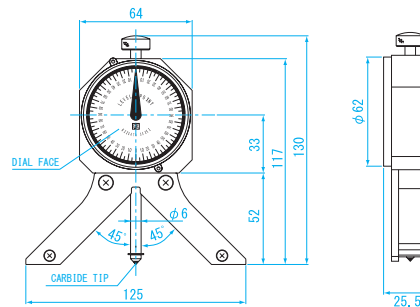
- One touch direct angle reading
- You can quickly and accurately measure any angle from horizontal to vertical
- Punch end is carbide tipped
- Magnetic feet

SPECIFICATIONS

- Measuring Range: 0~360°
- Minimum Reading: 1°
- Within 1°
- Applicable diameter for V base: φ20~100mm

● DIMENSIONS

Units: mm



Order No.	Model No.	Dimensions H × W × T (mm)	Weight
011022	LP-360	130 × 125 × 25	400g

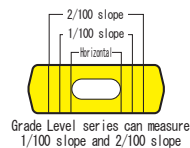
GRADE LEVEL



GL-450



GLM-450
(with magnet)



USE

- Measuring horizontal, vertical

MATERIAL

- Body: Aluminum

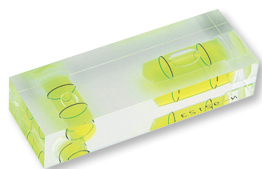
FEATURES

- Luminous vial can be seen clearly, even in the dark
- Graduations at 1/100, 2/100 inclination value
- Vial has large lens for easy reading
- GLM type are with magnet

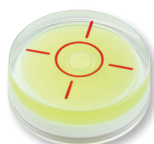
Sensitivity is the amount of gradient required to make the bubble move. Precision [0° ± precision value] is the range of variation in the reading.

Order No.	Model No.	Note	Length (mm)	Height (mm)	Thickness (mm)	Sensitivity (mm/m)	Precision (mm/m)	Weight
011049	GL-230	-	230	45	22	0.35	± 1.00	190g
011050	GL-300	-	300					220g
011051	GL-380	-	380					270g
011052	GL-450	-	450					300g
011053	GL-600	-	600					390g
011054	GL-900	-	900					560g
011059	GLM-150	with magnet	155	50	20			170g
011060	GLM-300		300					320g
011061	GLM-380		380					360g
011062	GLM-450		450					400g
011063	GLM-600		600					460g

MINI LEVEL



CT-70



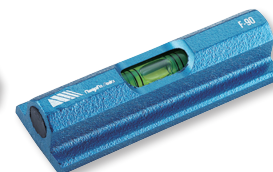
CR-24



A-90-17



T-100



F-90



S-90

USE

- Horizontal measurements for construction, installation, and leveling machinery

MATERIAL

- Acrylic resin, aluminum, cast iron

Sensitivity is the amount of gradient required to make the bubble move. Precision [0° ± precision value] is the range of variation in the reading.

Order No.	Model No.	Type	Length (mm)	Height (mm)	Thickness (mm)	Sensitivity (mm/m)	Precision (mm/m)	Weight
011070	CT-70	Acrylic resin/ Cross	70	25	15	0.5	± 1.5	40g
011072	CR-24	Acrylic resin/ Round	φ 24	-	10		± 2.5	10g
011077	A-90-13	Aluminum/ Hex	90	13	-		20g	
011078	A-90-17	Aluminum/ Hex	90	17	-		50g	
011079	A-105-13	Aluminum/ Hex	105	13	-		20g	
011080	A-105-17	Aluminum/ Hex	105	17	-	50g		
011081	S-65	Aluminum/ Straight	65	20	14		± 1.5	40g
011082	S-90	Aluminum/ Straight	90	20	14		50g	
011083	T-50	Aluminum/ Flat	50	30	15			50g
011084	T-100	Aluminum/ Flat	100	30	15		120g	
011085	F-90	Cast iron	90	20	30		180g	



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

SUPER STRONG MAGNETIC LEVEL



Twice as strong as our other magnetic levels



USE

- Horizontal, vertical, and 45° measurements

MATERIAL

- Plastic

FEATURES

- Magnetic measuring surface (Attraction force: 118N)
- V-grooved measuring surface for convenient measurement on round objects

SPECIFICATIONS

- Bubble tube sensitivity: 0.50mm/m=0.0286°
- Vial accuracy: within ±1.50mm/m=±0.0859°
- 4-line acrylic bubble tube with phosphorescent tape with 360° acrylic spot level (ML-100KB·ML-100KW)

Order No.	Model No.	Color	Bubble tube type	Length (mm)	Height (mm)	Thickness (mm)	Weight
111218	ML-100KB	Black	Horizontal - Vertical	100	47	20	80g
111219	ML-100KW	White					
111220	ML-150KB	Black	Horizontal - Vertical - 45°	150			110g
111221	ML-150KW	White					



LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

DIGITAL PROTRACTOR



Big display. Angle memory saved and can use immediately.

USE

- Precise angle measurement for tooling and fixtures, assembly, machining, mold making, and for use as a standard

MATERIAL

- Blade: Stainless steel

FEATURES

- Display mode: [°], [']
- +/- switching mode
- 0-Reference can be set at any position
- Display orientation can be flipped 180°

SPECIFICATIONS

- Resolution: 1'·0.01°
- Accessories: Blade 150mm, blade 300mm, acute angle attachment, master square

POWER

- CR2032 (lithium) battery



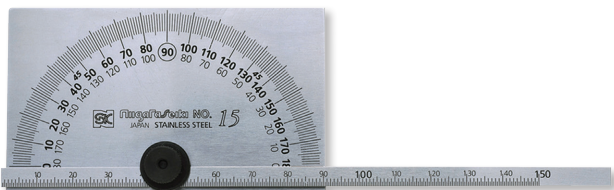
※ 1: Quantization Error (± 1 digit) not included ※ 2: Lock screw is not included ※ 3: Battery or blades are not included

Order No.	Model No.	Accuracy ^{※1}	Display Dimensions ^{※2} (mm)	Weight ^{※3}
151153	DUP-360A	± 5' (0.08°)	φ 76 × 32	350g

PROTRACTOR No.15



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- With rectangle head
- The blade is firmly set on the center of the protractor by a knurled nut and adjustable to any desired angle for use as a protractor
- Also can measure depth

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Protractor size: (H) 52mm × (W) 90mm × (T) 1.2mm
- Blade size: (L) 177mm × (T) 1.2mm
150mm scale (Graduation: 0.5mm)

Order No.	Model No.	Weight
008000	PRT-15	80g

PROTRACTOR No.19



HOW TO MOVE

No. 19 polished finish



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Polished finish

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Protractor size: $\phi 90\text{mm} \times (T) 1.2\text{mm}$
- Blade size: (L) 204mm × (T) 1.2mm
100mm scale (Graduation: 1mm)

For angle measurement



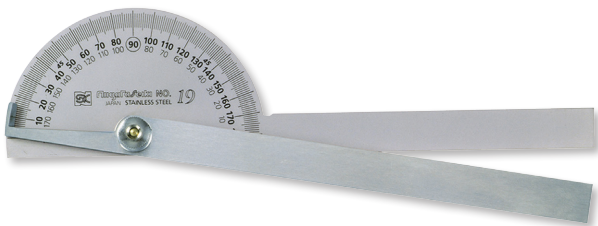
Order No.	Model No.	Weight
008001	PRT-19	81g

PROTRACTOR No.19



HOW TO MOVE

No.19 with two blades



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- With 2 blades
- Satin finish
- Can measure acute angle down to 10°

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Size: $\phi 90\text{mm} \times (T) 1.2\text{mm}$
- Blade size: (L) 204 × (T) 1.2mm

Order No.	Model No.	Weight
008002	PRT-19SW	110g

PROTRACTOR No.19



HOW TO MOVE

No. 19 satin finish



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Satin finish

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Size: $\phi 90\text{mm} \times (T) 1.2\text{mm}$
- Blade size: (L) 204mm × (T) 1.2mm
100mm scale (Graduation: 1mm)

Order No.	Model No.	Weight
008003	PRT-19S	81g

LEVELNIC

PRECISION

LEVEL

ANGLE

LEVEL

PROTRA

CTOR

PROTRACTOR No.19A



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Polished finish
- Cutout for measuring small angle

SPECIFICATIONS

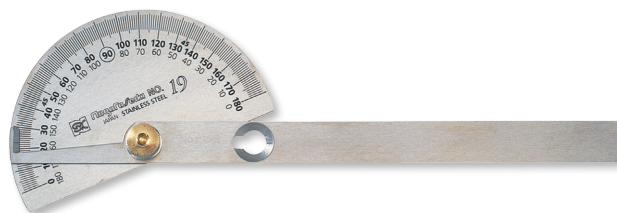
- Graduation: 1°
- Maximum angle: 90°
- Accuracy: ±20'
- Protractor size: φ90mm×(T)1.2mm
- Blade: (L)204mm×(T)1.2mm

Order No.	Model No.	Weight
008004	PRT-19A	90g

PROTRACTOR No.19B



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Polished finish
- Protractor blade contains stop for setting a baseline angle and measuring against that set point

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Protractor size: φ90mm×(T)1.2mm
- Blade: (L)204mm×(T)1.2mm

Order No.	Model No.	Weight
008005	PRT-19B	90g

PROTRACTOR No.182



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Satin finish
- Center lock nut has a built in needle for marking center point

SPECIFICATIONS

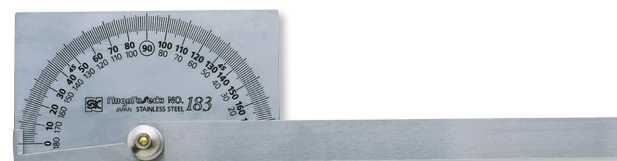
- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Protractor size: φ90mm×(T)1.2mm
- Blade: (L)204mm×(T)1.2mm

Order No.	Model No.	Weight
008182	PRT-182S	155g

PROTRACTOR No.183



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- With rectangle head
- Satin finish

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±20'
- Protractor size: (H)52mm×(W)90mm×(T)1.2mm
- Blade: (L)204mm×(T)1.2mm

Order No.	Model No.	Weight
008183	PRT-183S	90g

PROTRACTOR No.30



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Angle measurement
- Satin finish
- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±15'
- Protractor size: φ120mm×Thickness 1.5mm
- Blade size: (L)315mm×(T)1.5mm

Order No.	Model No.	Weight
008030	PRT-30S	190g

PROTRACTOR No.101



HOW TO MOVE



USE

- Graduation on blade

MATERIAL

- Stainless steel

FEATURES

- Satin finish
- Blade can be fixed. Ideal for work requiring high accuracy.

SPECIFICATIONS

- Graduation: 1°
- Maximum angle: 180°
- Accuracy: ±15'
- Protractor size: φ120mm×(T) 1.5mm
- Blade size: 304mm×(T) 1.5mm

Order No.	Model No.	Weight
008101	PRT-101S	158g

PROTRACTOR No.300 · No.400 · No.600 · No.1000



HOW TO MOVE

USE

- Graduation on blade

MATERIAL

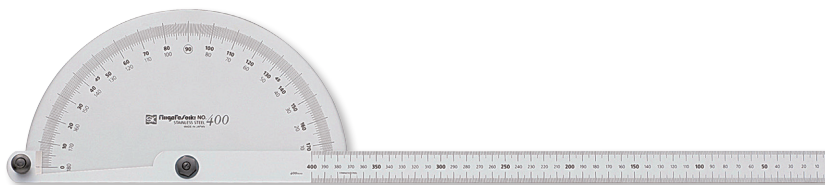
- Stainless steel

FEATURES

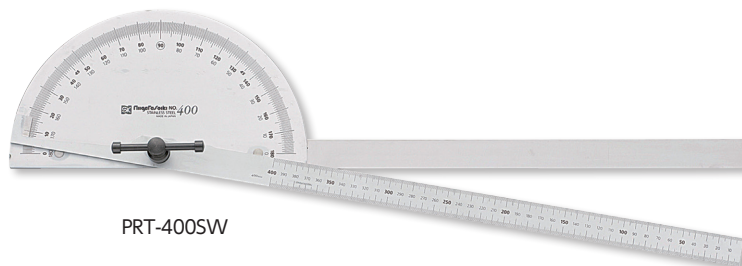
- Satin finish
- With T-handle lock nut (PRT-300SW, PRT-400SW)

SPECIFICATIONS

- Graduation: 0.5°
- Maximum angle: 180°
- Accuracy: ±15'



PRT-400S



PRT-400SW

Order No.	Model No.	Size	Diameter (mm)	Thickness (mm)	Number of blade	Blade Length (mm)	Blade Thickness (mm)	Graduation on Blade	Weight
008300	PRT-300S	300mm	210	2.0	1	500	2.0	300mm (1mm step)	610g
008400	PRT-400S	400mm	250	2.0		634	2.0	400mm (1mm step)	700g
008600	PRT-600S	600mm	320	2.5		823	2.5	600mm (1mm step)	1.6kg
008700	PRT-1000S	1000mm	320	2.5		1260	2.5	1000mm (1mm step)	2kg
008302	PRT-300SW	300mm	210	2.0	2	489	2.0	300mm (1mm step)	670g
008402	PRT-400SW	400mm	250	2.0		634	2.0	400mm (1mm step)	1.1kg
008602	PRT-600SW	600mm	320	3.2		823	2.5	600mm (1mm step)	2.45kg
008702	PRT-1000SW	1000mm	320	3.2		1260	2.5	1000mm (1mm step)	3.15kg



LEVELNIC

PRECISION

LEVEL

ANGLE

LEVEL

PROTRACTOR

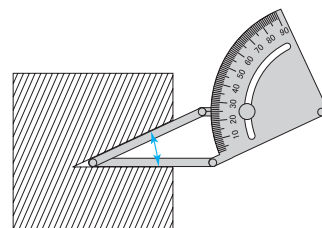
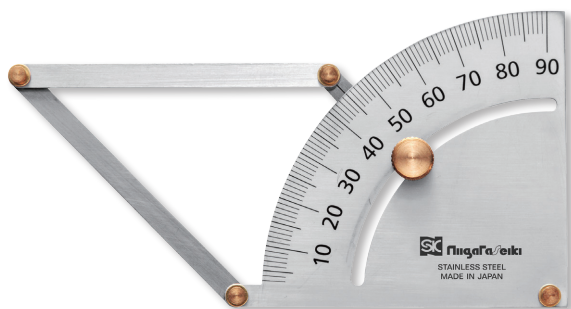
INSIDE PROTRACTOR



HOW TO MOVE

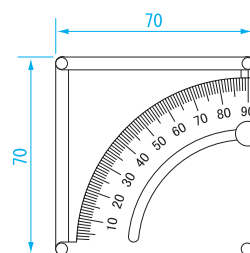
Measure interior angles in one step.
Measurements at a glance.

● Example of use



Measurement of interior angles

● DIMENSIONS Units: mm



USE

- Measurement of interior angles

MATERIAL

- Stainless steel

FEATURES

- Measure interior angles at a glance
- Silver matte finish for easy to read scale
- With plastic case for convenient transport

Order No.	Model No.	Graduation	Angle measurement range	Accuracy	Weight
007517	IP-90	1°	10°~90°	± 0.5°	43g

LEVELNIC

PRECISION LEVEL

ANGLE

LEVEL

PROTRACTOR

PROTRACTOR No.192



PRT192-120S

USE

- Set attachment angle for machines and jigs

MATERIAL

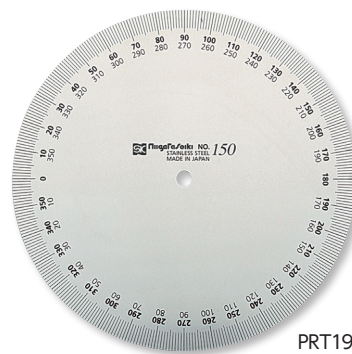
- Stainless steel

FEATURES

- Polished finish: PRT192-90S
- Satin finish: PRT192-120S·PRT192-200S·PRT192-250S·PRT192-300S

Order No.	Model No.	Graduation	Maximum Angle	Diameter (mm)	Thickness (mm)	Accuracy	Weight
008901	PRT192-90S	1°	180°	90	1.2	±20'	40g
008903	PRT192-120S			120	1.5		80g
008930	PRT192-200S			210	2.0		310g
008940	PRT192-250S	0.5°	180°	250	2.0	±15'	440g
008960	PRT192-300S			320	2.5		870g

PROTRACTOR No.193



PRT193-150

USE

- Set attachment angle for machines and jigs

MATERIAL

- Stainless steel

FEATURES

- A circle plate protractor
- Satin finish

Order No.	Model No.	Graduation	Maximum angle	Diameter (mm)	Thickness (mm)	Accuracy	Weight
009109	PRT193-90	1°	360°	90	1.2	±20'	60g
009112	PRT193-120			120	1.5		140g
009115	PRT193-150			150	1.5		210g
009120	PRT193-200			200	2.0		510g
009125	PRT193-250			250	2.0		780g
009130	PRT193-300			300	2.5		1.38kg