

# DIGITAL REVOLUTION SPEEDOMETER DIGITAL COUNTER CATALOG



**Tachometer**



**StroboScope**



**Sensor**



**Digital**



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# Handy Type LED STROBOSCOPE



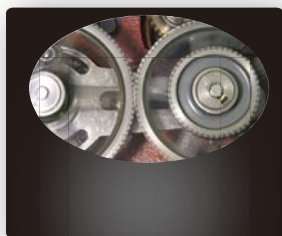
## MULTI-LAMP FORM DEFERRED TYPE LED STROBOSCOPE



### HANDY TYPE LED STROBOSCOPE

## DT-325 / 326

- For checking scratches, cracks, burr, and oscillation on gear meshing of high speed revolution machine.
- For revolution speedometer.



- In the lamp, long life high luminance white LED is employed. Visibility of high speed revolution area is improved.
- Handy mini type light-weight (500g)
- Ultra wide scope of measuring range of 60 ~ 120,000 fpm \* (1 ~ 2000 Hz)
- Even abroad, could be used with relaxation, with CE mark.
- With input/output signal. Radiation synchronized with revolution machine is possible (only DT-326)
- With phase variation function. Rested image phase is possible. (Can be checked by taking a snap)

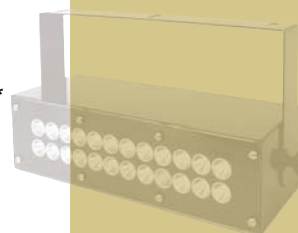
### Multi-Lamp Form Deferred Type LED STROBOSCOPE

## DT-329

- For checking scratches, cracks, pin-hole etc. of seal printing, gravure printing, and form printing.



- In the lamp, long life high luminance white LED is applied. Visibility of high speed revolution area is improved.
- Ultra wide scope of measuring range - scope 60 - 120,000 fpm\* (1 - 2000 Hz)
- Corresponds to high revolution printing machine
- With outer parts input/out.



\*fpm.. is the Luminous frequency per minute.

For Details Please See Page 9~10

# DIGITAL REVOLUTION SPEEDOMETER Panel Model

## SERIES

- Low Price Type
  - DT-5TS : Basic Input Type
  - DT-5TL : Differential Input Type.
- High Function Type
  - DT-5TX : Basic Input Type.
  - DT-5TV : Differential Input Type.
  - DT-5TV : Voltage Input Type.
- Exclusively Revolution Speed Measuring Type.
  - DT-5TP
- Revolution Speedometer.
  - DT-5TG



## DIGITAL REVOLUTION SPEEDOMETER



Most suitable for measuring revolution speed, speed, and transit period

- High function with low price
- Enhanced IP66 equivalent (front panel)
- Corresponds to wide range signals
- DIN size of 96mm x 48mm, reduced to 92mm length (DT-5TS, DT-5TL)
- With W sub-display, can multi-display at one time. (not possible for DT-5TP, DT-5TG)

## APPLICATION

<b>DT-5TS</b> Heat Treatment Furnace Conveyor Transit Period Indication	<b>DT-5TS</b> All Types of Liquid Flow Measurements	<b>DT-5TS</b> High Speed Winding Speed Indication.
<b>DT-5TX-RMT</b> Film Speed Ratio Indication.	<b>DT-5TS</b> Oven Conveyor Speed Indication.	<b>DT-5TG</b> Saw Belt Speed Indication.

Model		DT-5TX/DT-5TF		
Action Mode		Revolution Speedometer Mode/Flow Meter Mode	Transition Period Meter Mode	Time Span Mode
Display	No.1	0~999999/6 Digits	0:00:00~0:59:59 (Hr,Min, and Sec 60 Adv. Indication)	0:00:00~0:59:59 (Hr,Min, and Sec 60 Adv. Indication)
	No. 2	-	0.00~999:99 (Second : 1/100 Sec. 10 Adv. Indication)	-
Display Parts		Main Display Parts : Red Color 7 Segments LED. Letter Height 15mm 6 Digits		
		Sub Display Parts (2Nos) : Green Color 7 Segments LED Letter Ht.6.5mm.		
Input Scope		6 Digits + 6 Digits Indication Possible.		
Pre-scale Function		0.0067Hz ~ 100k Hz		
Upper Lower Limit Value		Parameter setting system through front panel key, indication value instructions (Combining) also possible.		
Preventive Structure		10ms~3600s		
Outer Dimensions		Upper lower limit value could be displayed through green LED to sub display parts		
		Front Panel IP66 (Equivalent), Back Part Terminal Platform IP20		
		W96 x H48 x D134mm(DIN)		



# DIGITAL COUNTER Panel Model

## SERIES

With 2 Steps Preset Output

DT-601CG



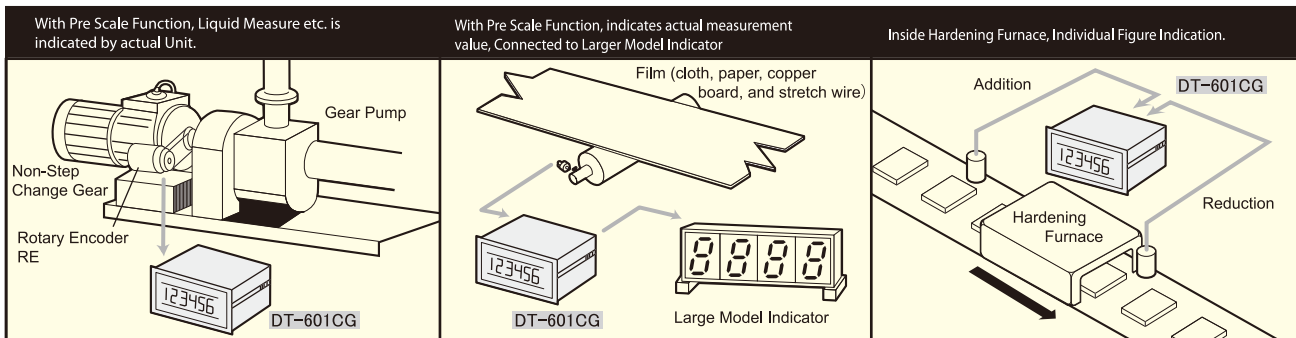
## Digital Counter



## With Operational Function Reversible Integration Counter

- Front surface water-drop proof specifications (IP66Equivalent)
- Free current between 85-264V
- Corresponds to RoHS orders
- BCD output, analog output - Corresponding option possible

## APPLICATION



Model	DT-601CG
Movement System	Adder, Reducer, Adjustable
Display Equipment	LED 6 Digit, Letter Height 14mm, Red Color
Display Scope	-1099998
Counting Scope	3 Round Stop, Endless, Over Rotation Display Selection Possible.
Pre-scale	Per 1 Signal Multiplication Factor $1 \times 10^{-9}$ 9999 free Setting
Decimal Point Indication	Decimal Point Less than from 1 Digit to 3 Digits free selection possible
Power-Off Memory	100,000 times within 10 years.
Input System	Individual, Order, Phase Contrast (RE Type)
Input Signal	NPN Open Corrector Signal, Voltage Pulse Signal (< L:2V, H:3.8~30V)
Re-set System	Manual Reset, Outer Parts Reset
Outer Parts Re-set Signals	> 50ms NPN Open Corrector or Existing Connection Point Signal
Calculation Ban Signal Response Time	> 50ms NPN Open Corrector or Existing Connection Point Signal
Current Output for Sensor	DC12V $\pm$ 10% 100mA MAX (By Option 24V 60mA possible)
Suitable Detector	Rotary Encoder, nearby connecting switch, Gear Sensor, Contact
Working around Temperature	0 ~ 45°C
Working around Humidity	30 - 80% RH (however, condensation not allowed)
Working around Atmosphere	No Corrosion Gas expected
Electricity Consumption	AC Current Less than about 20VA, DC Current Less than about 6VA
Current	AC Specification 85-264V(50/60Hz), DC Specification 12-24V( $\pm$ )10%
Case Material	Cabinet : ABS Resin with Glass (Black Color), Terminal Stand P.B.T. Black Color
Outer Dimensions/ Weight	W96 x H48 x D130mm/About 400 g.
Protection Level	IP66 Equivalent (Front Face Part)
Accessories	Terminal Stand Cover : 2Nos. (Acrylic Transparent) Rubber Packing (NBR Black) Unit Label



## SERIES

RE SERIES  
DETECTION  
ROLLER

## ROTERY ENCODER

### Shaft Direct Type Photo-Electric Form Revolution Detector

- Revolution Torque is extremely small and hence without loading the targeted measurement object, per revolution output pulse figure could be detected.
- Corresponds to wide scope revolution detection from low speed to high speed

Model	RE-1 (1mutual output: for revolution speed meter, For Addition Counter)	RE-2 (2 mutual output for reversible integration counter)
Output pulse figure and working revolution speed scope	60 pulse : 0~5000rpm 600 pulse : 0~5000rpm	30 pulse 0~5000rpm
Supply voltage,current	DC+4.75V~+30V Less than 50mA	DC+4.75V~+30V Less than 60mAMax.
Response Frequency	100kHz	
Protection Structure	IP50	

\* Other pulse figures are also available. Please inquire

### Detection Roller (sold separately)

Connecting to rotary encoder (30P/r), measurement values in cm could directly be indicated for measuring length and circumferential speed.



## SERIES

SE-P12  
SE-P12-1

## ADJACENT SWITCH

### SE-P12

PNP Open Corrector Output - One Revolution One Pulse Type. Oscillation Type Revolution Detector.

### SE-P12-1

PNP Open Corrector Output - One Revolution One Pulse Type. Oscillation Type Revolution Detector.

Detection Gear is not necessary. Detection is possible only by installing the convex part at one place to the revolving body.

Model	SE-P12	SE-P12-1
Supply Voltage	DC12V-24V, Working Voltage 10V-30V	
Current Consumption	Less than 10mA	
Responding Frequency	MAX 1500 Hz	
Output Form	PNP Voltage Output	NPN Open Corrector
Working Distance	Less than 2mm(In case of detection body - 12x12xThickness 1mm)	
Detection Body	Magnetic Body, Metal Protuberance	



## SERIES

SE-T2

## ROLLER TYPE ENCODER

Encoder making easy measurement possible for length or speed.

- Pulse Output of 2 kinds viz. 10cm/p and 1cm/p are series.
- Even with no pre-scale function Indicator, Length Display is made easy.

Model	SE-T2-100	SE-T2-10
Supply Voltage	DC12V	
Current Consumption	Less than 10mA	
Responding Frequency	MAX 20k Hz	
Output Pulse	10cm/p	1cm/p
Pulse Per Rotation	3 Pulse	30 Pulse
Output Signal	Phase Difference 2 Phase Signal, Voltage Pulse, Output resistance 4.7kΩ	
Roller	Outer circumference 300mm±0.1%	



#### SERIES

Gear Sensor  
SE-G

## GEAR SENSOR

**For collective detection gear type, high resolving power and adjacent sensor**

The gear teeth count detection is possible so also stabilized detection from low speed to high speed is possible.

Model	AC-G
Supply Voltage	DC+8.5V - +16V
Current Consumption	Less than 50mA
Responding Frequency	0-8000Hz(In case of Module 1.0)
Movement Distance	0.4-1.0mm(In case of Module 1.0)
Detection Body	Module 1.0-1.5
	Gear of magnetic metal with more than 0.4mm tooth-width.

## PERIPHERALS



#### SERIES

COP-3S COP-4S COP-5S COP-6S  
COP-3M COP-4M COP-5M COP-6M  
COP-3L COP-4L COP-5L COP-6L

## LARGE TYPE INDICATOR

**Corresponding to wide range all types of display - Large Type Indicator**

Production Line Display Equipments of Industries, Time Table Displays, Parking Lot Displays, Hospital Medication Number Display, Article Flow Advancement Display, Sports Score Board Display etc.

Letter Height : 80mm, 120mm, 200mm  
No. of Digits : 3 Digits, 4 Digits, 5 Digits, 6 Digits  
\* Corresponding to DT-601CG-B



#### SERIES

FGT-24P

## MICRO PRINTER

**BCD 6 Digit Parallel Data or selection is possible through the 2 input modes of Centronix conformity data.**

- . Arrangement of 250 varieties of unit printing
- . Index No. up to 4 digits -printing
- . Printing alignment selection possible
- . With positive and negative logic conversion ability
- . With interval printing ability (3 Seconds to 1Hour: 9 Varieties)



#### SERIES

FGT-PR2

## COMMON USE TYPE PEN RECORDER

**Pen recorder corresponding to analogue output recording.**

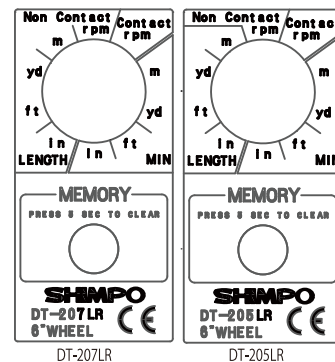
- . High accuracy of large in model line
- . Low price, light-weight, and compact
- . With usage of Cartridge Sign Pen, clean sweep ink trouble.

# DIGITAL REVOLUTION SPEEDOMETER Hand-Held Model



## HAND HELD MODEL REVOLUTION SPEEDOMETER

- Through Reflection Tape, Non-Contact Measurement and with Adapter fitting, Contact Measurement is possible.
- Measurement by pasting 2~5 Reflection Tapes.



● In case of N=5

- Applying Laser to the Light Source.
- Case is very much light and with excellent endurance made up of Aluminum Casting.

MODEL	DT-205LR	DT-207LR
Measuring Range	6 - 99,999 RPM	
Accuracy	$\pm 1$ RPM : 6 - 8,300 RPM	
	$\pm 2$ RPM : 8,300 - 25,000 RPM	
	$\pm 0.006$ % of reading $\pm 1$ digit (or 2 RPM max.) : 25,000 - 99,999 RPM	
Display	5 digit 0.47" (12 mm) high LCD   5 digit 0.4" (10 mm) high LED	
Measuring Units	RPM (on contact using adapter, included)	
	For rate : YPM, mPM, FPM, IPM and length : YRD, m, FT, IN use 6" cir. wheel with 200L adapter	
Memory	13 readings are stored in memory and retained for 5 minutes (last, max., min. and 10 extra measurements)	
Display	Update Time 1 second (typical)	
Display Update Time	1 second (typical)	
Detection	Laser diode	
System Control	Single-chip C-MOS microprocessor	
Over Range Indicator	Flashing numerals	
Voltage Requirement	2 AA 1.5 V batteries	
Low Battery Indicator	Flashing "LO BAT" display	"B" display
Auto Power Shut-Off	Yes	
Battery Life	40 hrs approx.	25 hrs approx.
Operating Temperature Range	32° -113° F (0 -45°C)	
Construction	Die-cast aluminum housing	
Weight	0.8 lb (365 g)	
Dimensions	6.6" L x 2.4" W x 1.8" H (167.5 mm x 60 mm x 46 mm)	
Standard Accessories	Reflective tape, cone adapter, carrying case, NIST certificate, 1 master wheel (6" cir.) and 200L adapter	

- Stabilized measurement with palm size compact design . Convenient to carry by hand.
- To the center of the targeted rotational axis, the contact is directly hit with measurement touch method and the detached place measurement made possible by non-touch form, thus 2 methods are arranged.
- With the wide rang of units viz. rpm, cm/s, m/min, m, km etc., conversion indication is possible.(PH-1B)

Model		CONTACT TYPE	LASER NON-CONTACT TYPE	CONTACT/LASER NON-CONTACT TYPE
		PH-100A	PH-200L	PH-200LC
Measuring Range		1.0 ~ 25,000 rpm	6.0 ~ 99,999 rpm	Contact: 6.0 ~ 25,000 rpm Laser non-contact: 6.0 ~ 99,999 rpm
Surface Speed (by 6" wheel)		0.1 ~ 3809.8 m/min	—	1.0 ~ 3809.8 m/min
		0.1 ~ 4,166.4 yards/min		1.0 ~ 4,166.4 yards/min
		3 ~ 99,999 inches/min		36 ~ 99,999 inches/min
		0.2 ~ 12,499 feet/min		3.0 ~ 12,499 feet/min
Length (by 6" wheel)		0.01 ~ 99,999 m	—	0.2 ~ 99,999 m
		0.01 ~ 99,999 yards		0.2 ~ 99,999 yards
		1 ~ 99,999 inches		
		0.1 ~ 99,999 feet		0.5 ~ 99,999 feet
Total Number Of Revolutions		0.1 ~ 99,999	—	1 ~ 99,999
Measuring Accuracy	Revolutions	1.0~599.9 rpm: ± 1 rpm 600.0 ~ 25,000 rpm: ± 0.006% and ± 0.5 digit	6.0 ~ 599.9 rpm: ± 1 rpm 600.0 ~ 99,999 rpm: ± 0.006% and 0.5 digit	
	Surface, Speed, Length	± 0.4% and ± 1 digit	— ± 0.4% and ± 1 digit	
Display Size		5 digit 12 mm height LCD		
Memory Function		14 readings are stored in memory and retained for 5 minutes (Last, Max, Min, Average and 10 selectable measurements)		
Update time		1 second		
Detection		Optical coupler, 20 pluses per rev.	Laser beam	
Auto Power Off Function		5 minutes		
Batteries		3 AA 1.5 Volts		
Low Battery Indicator		Flashing "LO BAT" display		
Over Range Indicator		Flashing "OVR" display		
Operating Temperature		0~45°C		
Construction		ABS resin		
Outside Dimensions		122.5L × 64W × 31.5H mm	115.5L × 64W × 31.5H mm	115.5L × 64W × 31.5H mm Overall length with contact adapter : 149mm
Weight		170g	160g	160g(contact adapter: 50 g)
Accessories		Carrying case, Cone adapter, Funnel adapter, 6" wheel, Instruction manual, Certificate of calibration	Carrying case, 35 Reflective tapes, Instruction manual, Certificate of calibration	Carrying case, Cone adapter, Funnel adapter, 6" wheel, Contact adapter, 35 Reflective tapes, Instruction Manual, Certificate of calibration

### SERIES

#### NON-CONTACT MULTI-USE

DT-205LR  
DT-207LR



### SERIES

#### CONTACT TYPE

PH-100A

#### NON-CONTACT TYPE

PH-200L  
PH-200LC





## SERIES

### CONTACT TYPE

DT-105A

DT-107A

- . There is no switching over of range from Lower 0.1rpm to 25000rpm and therefore it is OK.
- . The LCD (Crystallized) is large to display numeric value and unit even when dark, clearly confirming red color LED (Luminescence Diode), 2 types are serialized.
- . The outer case is lighter in weight and made up with the excellent endurance aluminum die casting.
- . With AA size Alkaline Dry Cell 2 Nos., Long duration and continuous measurement is possible, meaning that there is economical use of energy.

	DT-105A	DT-107A
Measuring Range	0.10 - 25,000 RPM with floating decimal	
Accuracy	±0.06 RPM : 0.10 - 999.9 RPM	
	±0.6 RPM : 1,000.0 - 9,999.9 RPM	
	±0.006 % of reading ±1 digit (or 2 RPM max.) : 10,000 - 25,000 RPM	
Display	5 digit 0.47" (12 mm) high LCD	
Measuring Units	Revolutions : RPH,RPM	Feet : FPH,FPM
	Yards : YPH,YPM	Inches : IPM
	Length : m, cm, inches, feet, yards	Miles : MPH
	Total Revolutions : REV	Meters : mPM,mPM
Memory	13 readings are stored in memory and retained for 5 minutes (last, max., min. and 10 extra measurements)	
Display Update Time	1 second (typical)	
Detection	Optical coupler, 60 pulses/rev.	
System Control	Single-chip C-MOS microprocessor	
Over Range Indicator	Flashing numerals	
Voltage Requirement	2 AA 1.5 V batteries	
Low Battery Indicator	Flashing "LO BAT" display	"B" display
Auto Power Shut-Off	Yes	
Battery Life	45-60 hrs approx.	25 hrs approx.
Operating Temperature Range	32° - 113° F (0 - 45° C)	
Decimal Point	Floating	
Construction	Die-cast aluminum housing	
Weight	0.9 lb (400 g)	
Dimensions	7.2" L x 2.4" W x 1.8" H (182.5 mm x 60 mm x 46 mm)	
Warranty	1 year	
Standard Accessories	2 cone adapters, 1 funnel adapter, 1 3-1/2" extension shaft, NIST certificate, carrying case, 1 master wheel (6" cir.)	
Optional Accessories	Wire/yarn fixture, cone adapter, funnel adapter, extension shaft, 6" measuring wheel, 12" measuring wheel	

\* When the speed of High Speed targeted item, length measurement is to be done, it is recommended that 12Model Foil may be used.

# DIGITAL SCALING METER



## SERIES

DC Voltmeter  
Ammeter  
Receiving Instrument

DT-451A

## DIGITAL SCALING METER

Corresponds to Torque, Speed, Pressure, Temperature etc.  
wide range measurement observations.

- . High luminance large type original LED employed
- . Frequently used setting items preferential group
- . With scaling, average operation function, PEAK Button measurement function
- . Front Panel is IP65 protected structure
- . Easy operation and multi-options

Model	DT-451A
Indication	-99999~+99999
Indication Parts	Red color or green color LED (Letter Height 15.2mm) Free selection choice of color is available.
Pre-Scale Function	-99999~+99999 (Full Scale Indication)
Resolution	1/100000
Sampling	15 Rev./s.
Protection Structure	Front operation parts IP65
Outer Dimensions	W96 x H48 x D92mm (DIN)

### Standard Functions :

- Hold (Input - without isolation)
- Zero Set (Input - without isolation)
- Off-set fixed
- 10o Digit 0 fixed
- Peak & bottom Memory
- Amplitude Measurement
- Average Operation
- Division Average, Movement Average

# STROBOSCOPE

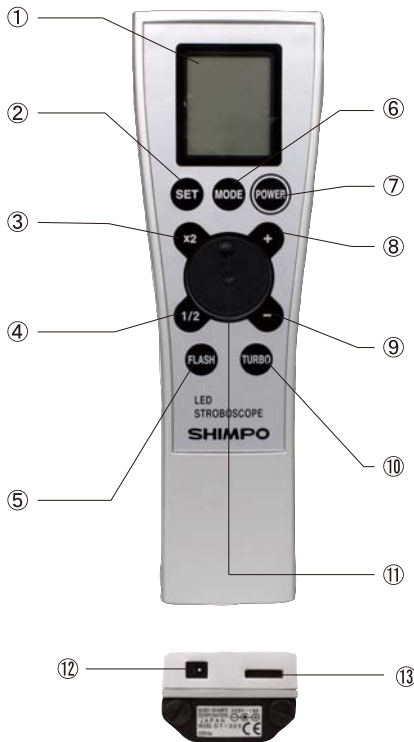
## SERIES

- **Handy Type**  
**DT-325(Standard.Model)**  
**DT-326(High Function Model)**

For Checking Scratch, Crack, Burr, Oscillation, Gear Meshing .



## Handy Type LED STROBOSCOPE



### ① LCD Display

Setting value, condition etc. is indicated. (with back light)

### ② SET Key

Used for unit switching, parameter setting items selection, setting value recording

### ③ x 2 Key

At the time of inner parts oscillation mode, pressing every time, the luminous frequency could be set at double the present luminous frequency.

### ④ 1/2 Key

At the time of inner parts oscillation mode, pressing every time, the luminous frequency could be half of the present luminous frequency.

### ⑤ FLASH Key (DT-325)

At the time of inner parts oscillation mode, pressing every time, the luminous is turned ON/OFF.

### RATIO Key (DT-326)

Luminous pulse width setting is possible. (Stop motion distinct adjustment could be done.)

### ⑥ MODE Key

Inner parts oscillation mode/ parameter setting mode/ outer part synchronization mode could be switched over. (outer parts synchronization mode is only for DT-326.

### ⑦ POWER Key

Power supply is turned ON/OFF.

### ⑧ + Key

During the luminance of inner parts oscillation, pressing every time, the present luminous phase gets advanced by 3 degrees of standard phase. While setting the parameter mode, it is used for change in the set value. (DT-326 : PHASE +Key)

### ⑨ - Key

During the luminance of inner parts oscillation, pressing every time, the present luminous phase gets reduced by 3 degrees of standard phase. While setting the parameter mode, it is used for change in the set value. (DT-326 : PHASE -Key)

### ⑩ TURBO Key (DT-325)

During short period (1 min) temporarily the luminous moves UP.

### ECO-Key (DT-326)

LED luminous brightness is brought to original, thus, battery life is extended.

### ⑪ DIAL

It sets luminous frequency.

### ⑫ DC POWER SUPPLY CONNECTOR

(DT-326 Only)

### ⑬ INPUT/OUTPUT SIGNAL CONNECTOR

(DT-326 Only)



## SERIES

- **Multi-Lamp Form Deferred Type**  
**DT-329**

For checking scratches, cracks, pin-hole etc. of printing.



### ① Power Supply Connector (AC Consent)

### ② Outer Parts, Input/Output Connector.

### ③ Power Supply Switch

### ④ POWER KEY

Supply is made ON/OFF.

### ● SET Key

Used for unit switching, parameter setting items selection, setting value recording

### ● MODE Key

Used for switching over of inner parts oscillation mode/ outer parts trigger mode/ parameter setting mode

### ● RATIO Key (DT-326)

Luminous pulse width setting is possible. (Stop motion distinct adjustment could be done).

### ● x 2 Key

At the time of inner parts oscillation mode, pressing this key every time, the luminous frequency could be set at double the present luminous frequency.

### ● 1/2 Key

At the time of inner parts oscillation mode, pressing this key every time, the luminous frequency could be half of the present luminous frequency.

### ● FLASH Key (DT-325)

At the time of inner parts oscillation mode, outer parts trigger, the luminous is turned ON/OFF.

### ● + Key

During the luminance of inner parts oscillation, pressing every time, the present luminous phase is advanced by 6 degrees of standard phase. While setting the parameter mode, it is used for change in the set value.

### ● - Key

During the luminance of inner parts oscillation, pressing every time, the present luminous phase is reduced by 6 degrees of standard phase. While setting the parameter mode, it is used for change in the set value.

## ■ Handy Type LED STROBOSCOPE

### ● Operation Part

Model			Standard Model DT-325	High Function Model DT-326
Unit			fpm, Hz	
Setting Resolution (Inner Part Oscillation)			60.0~3000.0fpm:0.1fpm, 3000.2~6000.0fpm:0.2fpm, 6000.5~12000.0fpm:0.5fpm	
			60.0~30000fpm:1fpm, 30002~60000fpm:2fpm, 60005~100000fpm:5fpm, 110000~120000fpm:10fpm	
Mode	Inner Part Oscillation	Luminescence Frequency Setting	Luminescence frequency could be revised to free value through dial	
		Revised Function	With key operation, luminescence frequency could be revised to 2 times or 1/2 time.	
			Pressing the key every time, it changes to 2 times, 4 times, 1/2times, 1/4times	
			The present luminescence phase could be shifted at +3 degrees or -3 degrees pressing the key every time.	
		Unit Switch Over Function	Setting is possible at "fpm" or "Hz"	
	Outer Parts Trigger	Lumi.Freq.( input possible Freq.)	1~166Hz, 60~10000fpm	
		Input possible Pulse Width	-	
		Unit Switch Over Function	"fpm" or "Hz" setting possible.	
	Parameter Setting	Measurement Range	Setting is possible at 1~2000Hz,(60~120000fpm)range or 1~200Hz (60~12000fpm) range.	
		Trigger edge	-	Possible to select for either upper or lower
		Delay Time (Angle)	-	Delay Period : 0~999ms, Delay Angle:0~359°
Setting is possible for ON/OFF				

### ● Display Part

Display Parts	(LCD With Back light)	6 Digit Numeric Value Display (Main Display), 6 Digit Numeric Value Display (Sub Numeric Value Display)
Luminescence		Battery Remaining Qty. Lower Display, Setting Items Display Parts, Unit Display Parts.
Power Supply		Ultra High Luminescence White color LED
Weight		1500 Hrs.(at 6000fpm luminescence, around more than 5 x 10 <sup>8</sup> times)
Luminescence		Alkaline AA Dry Cell (1.5V x 4 Nos.)
Power Supply		AC Adapter
Continuous Lumini. Period		-
About 80 Minutes		Exists. 5V 2.0A
At normal mode		at Eco mode
About 500g (Excluding Battery)		

The Value is subject to Using Brand New Alkaly Battery, Luminescence Period (ratio) set at 2.5

## ■ Multi-Lamp Form Deferred Type LED Strawoscope

### ● Operation Part

Model			Standard Model DT-329	
Unit			fpm, Hz (Switching Over possible by Parameter settings)	
Luminescence Frequency			1~2000Hz    60~120000fpm	
Setting Accuracy (Inner Parts Luminescence)			0.02%±1Unit (at 25°C)	
Setting Resolution (Inner Parts Luminescence)			1~200Hz    0.01Hz	
			1~2000Hz    0.01Hz	
			60.0~3000.0fpm:0.1fpm, 3000.2~6000.0fpm:0.2fpm, 6000.5~12000.0fpm:0.5fpm	
			60.0~30000fpm:1fpm, 30002~60000fpm:2fpm, 60005~100000fpm:5fpm, 110000~120000fpm:10fpm	
Mode	Inner Part Oscillation	Luminescence Frequency Setting	Luminescence frequency could be revised to free value through Dial	
		Revised Function	Lumin. Frequency : 1~2000Hz 60~120000fpm Luminescence frequency could be revised to free value	
			With Key Operation, Luminescence Frequency could be revised to 2 times or 1/2 time.	
			Pressing the Key every time, it changes to 2times, 4times,.... 1/2times, 1/4times	
		Phase Revised Function	The present Luminescence Phase could be shifted at +6 degrees or -6 degrees pressing the Key every time.	
	Unit Switch Over Function	Setting is possible at "fpm" or "Hz"		
	Outer Parts Synchronization		Lumi.Freq.( input possible Freq.) 1~166Hz, 60~10000fpm Input possible Pulse Width : More than 50s	
	Parameter Setting	Measurement Range	Setting is possible at 1~2000Hz,(60~120000fpm)range or 1~200Hz (60~12000fpm) range.	
		Luminescence Period	With the scope of 0.1° ~ 1.0° ( /360°) at every 0.1° setting is possible	
		Trigaue	Sele. possible for either Raise range or Lower range	
		Delay Time (Angle)	Delay Period : 0~999ms, Delay Angle:0~359°	
Back light		Setting is possible for ON/OFF		

### ● Display Part

Display Parts	LCD	6 Digit Numeric Value Display (Main Display), 6 Digit Numeric Value Display (Sub Numeric Value Display),
Back light		Setting Items Display Parts, Unit Display Parts.
Lumini.Part		Yellow and green color LED
Power Supply		Ultra high luminescence white color LED
Weight		1 Ø AC 85 ~ 264V
		Around 4.5kg.



### SERIES

#### ■ Common Use Model

DT-311N

#### ■ Charging Method, Battery Built-In Model

DT-315N

#### ■ Common Use Model for Printing Machine

DT-311P

#### ■ Charging Model for Printing Machine

DT-315p



## DIGITAL STROBOSCOPE

High Speed Movement Body, Action of Revolving Body Stop Motion analysis.

- Wide Scope Measurement of 40.0 ~ 35,000 rpm.(DT-311N/315N)
- With the synchronization condition, image movement possible.
- Connector for outer part signal, Standard Equipment.

Model	DT-311N	DT-315N
Lumin. Rev. No.(rpm)	40.0~35000	
	In case of Outer Parts Synchronization 0~35000	
Setting Equipment	Multi Rev. Encoder, Tact Switch	
Flash Supply	Xenon Lamp	
Lamp Input	10W	
Power Supply	AC100~120V	Charging Method : Exclusive Nickel Hydro. Battery. Continuous 1 Hr. Luminescence
		AC Adapter : 2 Hrs. fast charging
		AC100V±10%
Weight	1.2kg	2.1kg
Accessories	Pistol Grip	Exclusive Adapter



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