

# SHIMPO INSTRUMENTS

Measuring Quality

## DT-315A Portable Stroboscope with Rechargeable Battery

### **DT-315A Heavy Duty, Portable Stroboscope with Rechargeable Battery.**

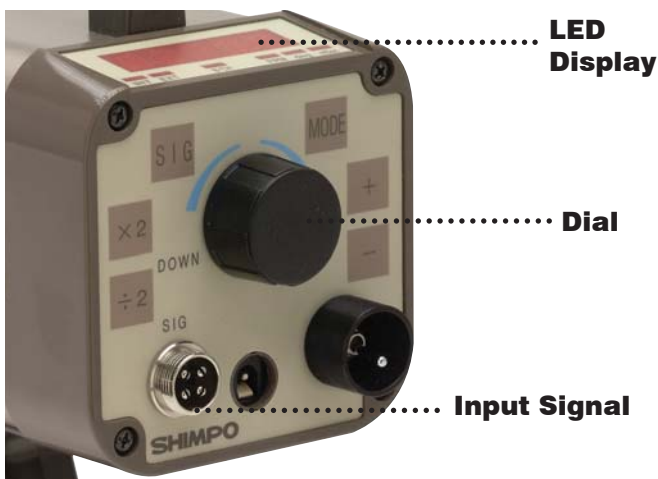
The DT-315A heavy duty, battery powered stroboscope possesses the same great features of the DT-311A with the added convenience of total portability via its own internal power supply. The quick recharge battery lasts up to two hours of full continuous usage with its high intensity flash rate. The DT-315A provides power flexibility by utilizing either its rechargeable internal, batteries or AC line-power when plugged into the included AC adapter/charger unit. These features make the DT-315A ideal for quality inspection and preventive maintenance of automated motion equipment.



### Features

- Internal, fast-charge rechargeable battery supply
- Aluminum construction provides exceptional durability
- High polish and focused reflector eliminates "blind" viewing areas
- External trigger allows unit to be automatically synchronized with equipment
- Continuous duty cycle eliminates need to shut down for cooling
- Phase shift allows visual analysis of rotating/reciprocating objects
- High accuracy (  $\pm 0.01\%$  of reading ) is ideal for QC inspection and process control
- Synchronous output enables strobe to drive other strobes
- Flash timer control conserves flash tube life
- Easy tri-pod or permanent mounting with integral mounting thread

### Easy Operation Control



**SIG**

Change Operation from INTERNAL to EXTERNAL flash control

**MODE**

Internal Signal "MODE" (Flash) or External Trigger Control LED Changes to Indicate FPM (flash/min.), flash delay in degrees and flash delay in milliseconds

**X2 / ÷2**

Adjust Flash Rate Settings Increase 2 times or decrease by 2 the flash rate setting when in "Internal" mode

**+/-**

Phase "SHIFT" Advance or Retard viewed motion in degrees or milliseconds

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## DT-315A Specifications

<b>Flashing Range</b>	40.0 - 35,000 fpm (flashes per minute)
<b>Accuracy</b>	±0.01 % of reading
<b>Resolution</b>	0.1 fpm: 40.0 - 5,000 fpm / 0.2 fpm: 5,001 - 8,000 fpm / 0.5 fpm: 8,001 - 10,000 fpm / 1 fpm: 10,001 - 35,000 fpm
<b>Phase Shift</b>	Use +/- push buttons (360° in 6 seconds)
<b>Display Update Time</b>	0.2 sec approx
<b>Output Signal</b>	Synchronous, 400 μsec. Pulse output, 0 to +12 VDC amplitude(approx.), 4.7 KΩ impedance
<b>Rate Multiplier/Divide</b>	0.0 to 35,000 fpm
<b>Flashing Range</b>	Synchronous Mode: 60.0 ~ 3,000FPM / Delay mode:200 ~ 3,000 FPM
<b>External Mode Accuracy</b>	±0.01 % ±1 digit
<b>Phase Shift</b>	0 to 359° with 1° resolution
<b>Delay Time</b>	0 to 2,000 mSec from 40 - 10,000 fpm
<b>External Trigger Input Signal</b>	LO level: 0 -0.8 VDC, HI level: 2.5 - 12 VDC or open collector (NPN),pulse width 50 μsec min.
<b>Input Impedance</b>	4.7 KΩ to 12 V / 6.8 KΩ to 0 V
<b>Display</b>	5 digits, 0.4" (10 mm) high, LED
<b>Flashtube Power/Life</b>	Xenon, 10 W max. (100 million flashes)
<b>Flash Duration</b>	10 to 40 μs automatically adjusts with flash rate
<b>Lux Rating</b>	8" (20 cm) Distance = 4500 lx @ 1500 fpm, 3375 lx @ 6000 fpm with 4.5" (110 mm) irradiation diameter. 20" (50 cm) Distance = 1300 lx @ 1500 fpm, 930 lx @ 6000 fpm with 10" (250 mm) irradiation diameter.
<b>Sensor Power Supply</b>	12 VDC (40 mA)
<b>Low Battery Indicator</b>	Display shows all L's
<b>Battery Life</b>	1 - 2 hours depending on flash rate
<b>Power Requirement</b>	Rechargeable Battery or AC Line Power with included AC adapter
<b>Operating Temperature</b>	32 - 104°F ( 0 - 40°C )
<b>Product Weight</b>	4.4 lbs (2 kg)
<b>Package Weight</b>	5.5 lbs (2.49 kg)
<b>Dimensions</b>	9.84" L x 4.72" W x 4.72" H (250 mm x 120 mm x 120 mm)
<b>Warranty</b>	2-Year
<b>Included Accessories</b>	AC charger/adapter, flash tube removal tool, handle



**DT-315A  
Viewing  
Labeling  
Machine**

DISTRIBUTED BY:

## Ordering Details

<b>DT-315A</b>	Heavy duty, rechargeable battery powered stroboscope
<b>DT-315A-230V</b>	Same as DT-315A except with 230V power
<b>NIST-STROBE</b>	NIST traceable certificate for digital stroboscopes, includes data

## Accessories

<b>BAT-DT315A/P-ASSY</b>	Internal, rechargeable battery assembly for DT-315A
<b>DT-315CHARGER</b>	AC adapter/charger for DT-315A
<b>CARRYING-CASE</b>	Carrying Case for DT-315A
<b>FLASHTUBE-311-2</b>	Replacement flash tube for DT-315A
<b>CABLE-311-10FT</b>	Input/output cable for DT-315A
<b>SAS-DT300</b>	Permanent mount swing arm
<b>SG-300</b>	Rubber strobe guard for DT-315A
<b>LS-S50MLR-DT311</b>	Laser sensor with NPN/PNP (NO,NC) outputs, 1.5 kHz frequency, LED indication, DT-315A Connector Cable, NEMA 6 (IP67) rating

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