

# Digital Stroboscope

## HHT30R Series



- ✓ NIST Calibration Certificate Included
- ✓ Internal Rechargeable Batteries or AC-Powered Models
- ✓ Electronic Switching Provides Continuous Cool Operation
- ✓ Tachometer Mode
- ✓ Internal Phase Shift
- ✓ Easy-to-Read Backlit Digital Display
- ✓ Latching Trigger and 1/4-20 UNC Tripod Mount Allow Hands-Free Operation
- ✓ TTL-Compatible Input/Output Jacks
- ✓ Splashproof Cover Available for Battery Models
- ✓ 6 User-Programmable Memory Locations

The HHT30 digital stroboscope provides reliable and accurate speed measurements as well as stop-motion diagnostic inspection. A rotary encoder enables quick, precise frequency setting from 30 to 14,000 flashes per minute. The crystal-controlled circuitry eliminates drift and allows readings accurate to 0.1 rpm. "Divide by 2" and "Multiply by 2" buttons let the user check actual rpm. With "Phase +" and "Phase -" buttons, the user can add or subtract internal phase delays to keep the reference viewing target in eyesight. An "Adder Mode" enables visual inspection for misalignment or bent odd-numbered fan blades, propellers, etc. In the "Tach" mode, the unit uses external sensors to measure up to 200,000 rpm directly without flashing the strobe. Up to 6 preset memory values can be recalled from memory, and the unit recalls the last value measured.

A "% Charge" indicator shows remaining battery life. The microprocessor-controlled charging circuit ensures long battery life.

### Specifications

**Flash Range:** 30 to 14,000 fpm, 0.5 to 233.33 fps  
**Flash Accuracy:** ±0.01% rdg or ±0.5 fpm  
**Flash Resolution:** 0.1 fpm  
**Tach Range:** 5 to 200,000 rpm  
**Tach Resolution:** 0.1 rpm, up to 99,999.9 rpm; 1 rpm, 100,000 to 200,000 rpm  
**Tach Accuracy:** ±0.01% rdg or ±0.2 rpm  
**Display:** 6-digit backlit alphanumeric LCD, 12.7 mm (0.5")  
**Average Power:**  
 HHT31: 15 W  
 HHT32: 10 W  
**Flash Energy:** 180 mJ (typical)  
**Flash Duration:** 20 to 50 µs  
**Flash Tube Life:** 100 million flashes typical  
**Power Supply:**  
 HHT31: 115 or 230 Vac, 50 to 400 Hz  
 HHT32: Internal rechargeable batteries, 6 Vdc @ 2.5 A max  
**Battery Life (HHT32):** Greater than 60 minutes @ 6000 fpm  
**External Trigger Input:** 1/8" phone plug, TTL compatible  
**Trigger to Flash Delay:** 5 µs, typical  
**Synchronization Output:** 1/8" phone plug, TTL compatible  
**Weight:**  
 HHT31: 0.7 kg (1.5 lb)  
 HHT32: 1.1 kg (2.5 lb)  
**Dimensions:**  
**Body:** 90.4 H x 93.0 W x 229 mm L (3.56 x 3.66 x 9")  
**Reflector Housing:** 122 mm Dia. (4.8")  
**Handle:** 108 mm L (4.25")  
**Tripod Mount:** 1/4-20 UNC  
**Operating Temperature:** 5 to 40°C (41 to 104°F)  
**Operating Humidity:** Max RH 80% for temperatures up to 31°C (88°F), decreasing linearly to 50% RH @ 40°C (104°F)



HHT32R shown smaller than actual size.



### To Order

Model No.	Description
HHT31R	Stroboscope, 115 Vac powered
HHT31R-KIT	HHT31 with rugged case and spare lamp
HHT31R-230	Stroboscope, 230 Vac powered
HHT31R-230-KIT	HHT31-230 with rugged case and spare lamp
HHT32R	Stroboscope with internal battery, 115 Vac, 3-hr recharger
HHT32R-KIT	HHT32 with 3-hr recharger, case and spare lamp
HHT20-ROS	Remote sensor for tachometer mode
HHT32-SPC	Splashproof protective cover for HHT32 models only

Comes complete with operator's manual and NIST certificate. HHT32 also includes rechargeable battery and AC charger. "KIT" models also include rugged carrying case and spare lamp.