

# Now 3 Ways to Gauge Your Video Recorders!

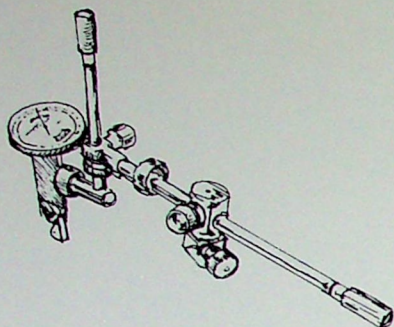
Tentel has 3 Product lines; all are designed to quickly and accurately troubleshoot problems and potential problems in your video tape transport, to keep it working properly.

All 3 products are so easy to use that anyone can perform critical measurements by reading and following the illustrated instruction manuals with each gauge.

# TENTEL

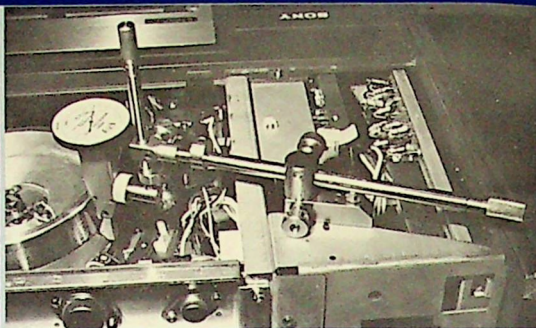
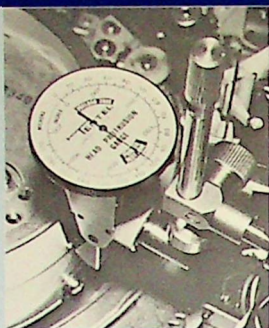


## HPG SERIES — Head Protrusion and Eccentricity Gauge



The new Tentel head protrusion and eccentricity gauge will do for head protrusion what the TENTELOMETER® did for tape tension — Destined to be a world standard of measurement — Again!

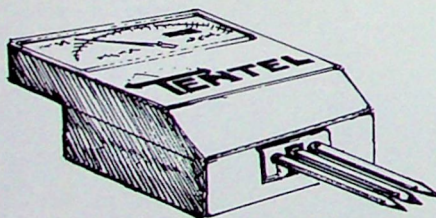
Head protrusion (tip projection) is extremely important for proper head to tape contact, and for interchange tip velocity. The Tentel HPG represents a design breakthrough which allows fast, accurate head protrusion measurements to be made easily and safely with a relatively inexpensive gauge. Now you can determine remaining head life, diagnose



head problems, and measure head wear. By measuring head remaining, service technicians can accurately determine the amount of use on any tape transport. The gauge provides readings in microns and ten thousandths of an inch. Thanks to the unique mounting system and the patent pending self-aligning probe, the HPG is extremely universal. The HPG can also be used for measuring head drum eccentricity. The HPG comes complete with everything required for fast, accurate, safe measurements including a 16 page set-up and trouble shooting guide and rugged foam lined carrying case.

Model	Application	Price
HPG-1	U-matic, Beta, VHS	\$479.
HPG-C	Ampex, Sony, RCA, Hitachi 1" Type "C"	595.
HPG Combo	Contains all components required to use as both the HPG-1 and HPG-C	825.
12C Kit	Converts the HPG-1 to allow use as HPG-C	375.
C21 Kit	Converts the HPG-C to allow use as HPG-1	260.
S1	See accessory listing for stand, which allows easier use of HPG-1 on Betacam® Recam® and newer portable Beta and VHS recorders.	

## T2 SERIES — TENTELOMETER® Tape Tension Gauges



TENTELOMETER® Tape Tension gauges are fast, accurate, and easy to use! Tension can be measured at various points in the tape transport to diagnose sources of tension problems. Gauges are universal, durable, and calibration can easily be checked in the field. Units are available to suit virtually any tape transport application. TENTELOMETERS are sold and used throughout the world and have become the "standard of reference" for tape tension measurements.

The TENTELOMETER® was recognized by the International Television Association (ITVA) and received their prestigious annual "Golden Reel—Technical Achievement Award" in 1984.

TENTELOMETERS vary primarily by their scale range, probe configuration, and the dynamic tension damping characteristics. "Normal" gauges (non-damped) can follow oscillating tensions accurately to 7 Hz.

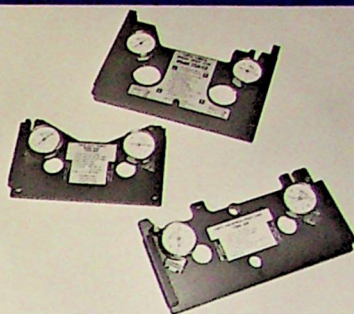
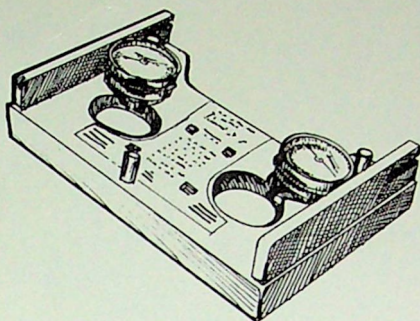
Viscously damped gauges ("D" in model number) will average an oscillating tension and will limit the response to 1/2 Hz. Viscous damping is generally recommended when tape speeds exceed 150 i.p.s.

Often a unit can be obtained to do more than one application. Please consult Tentel application engineering for your requirements.

Model	Application	Price
T2-H7-UM	VHS, Beta, Recam	\$295.
T2-H7-UMS	Betacam® (Modified T2-H7-UM)	345.
T2-H15-UM	All U-matic	295.
T2-H18-CBD	Sony BVH, Ampex VPR 1" Type "C" recorders	690.
T2-H20-CBD	RCA, Hitachi, Bosch 1" Video recorders	690.
T2-H20-ML	Quad and General Audio applications to 2" tape	295.



# TSH SERIES— Video Cassette Spindle Height Gauges



Tentel Spindle Height Gauge, (TSH, pronounced "Tush") can help you eliminate the two most common causes of ruined video tapes—edge damage and cassette binding. They are the only diagnostic tools on the market today which can pinpoint mysterious "tape eating" elevator latch and spindle end play problems.

TSH gauges are as simple to use as loading a cassette—simply read the two precision indicators thru the tape remaining window. Yes, they work on the new front loading machines too, merely remove the top cover.

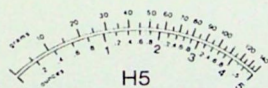
TSH gauges are precision machined from rigid cast aluminum tool and die plate, simulating ideal cassette dimensions. TSH gauges are factory calibrated and should never require re-calibrating, however a master checking block is included to ensure accuracy.

TSH gauges come complete with a fully illustrated instruction manual, initial supply of spindle correcting shims, and fitted foam lined carrying case.

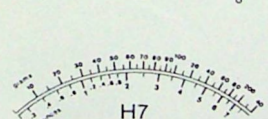
Model	Application	Price
TSH-U2	All U-matic including portable and front load	\$495.
TSH-B3	All Beta including Betacam	395.
TSH-V4	All VHS including Recam (Not VHS-C)	395.

NOTE: Subtract \$35 from TSH price when ordering with a T2 in a combination case, or \$65 from total when 2 TSH gauges are ordered in a combination case. Specify model number and "combo" on order.

## SCALES:



H5



H7



H12



H15



H18



H20

## PROBES:

### Standard

#### ML

- For 1/4" to 2" tape widths
- Special hard chromed stainless steel probes
- Non-rotating
- Low cost

#### UM

- Ultra miniature probes for small spaces
- For 1/4" to 1" tape widths
- Special hard chromed stainless steel probes
- Non-rotating
- Low cost

#### CB

- Minimum size rotating probes for small spaces
- For 1/4" to 1" tape widths
- Stainless steel probes, outer rollers chrome plated for durability
- Ball bearings on all rollers to eliminate tape drag and effect on servos

### Specials

#### UMS

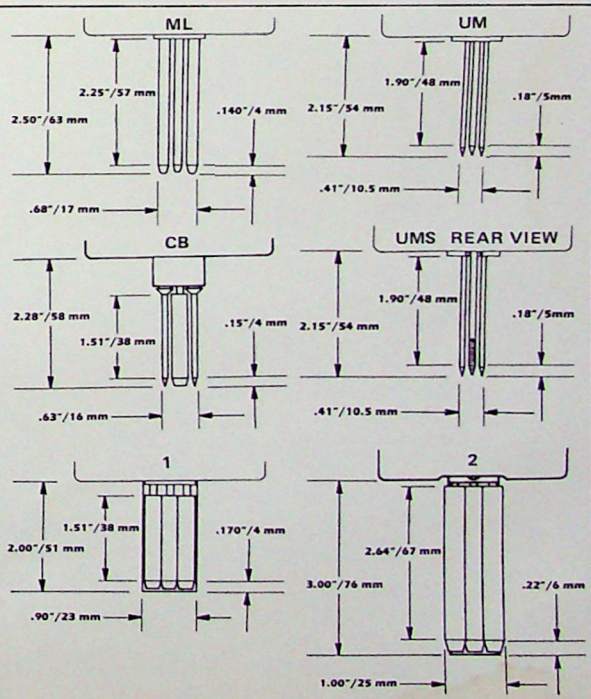
- Special relieved section on center probe to provide clearance for scanning video heads on Betacam recorders

#### 1

- For 1/4" to 1" tape widths
- Stainless steel probes
- Ball bearing rollers to eliminate tape drag error
- Integral protective roller guard and steady rest

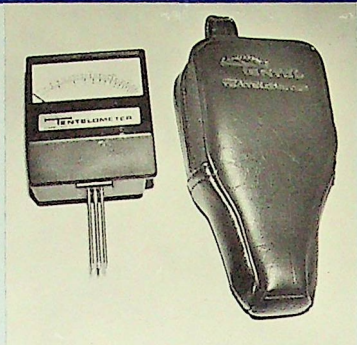
#### 2

- For 1/4" to 2" tape widths
- Stainless steel probes
- Ball bearing rollers to eliminate tape drag error
- Integral protective roller guard and steady rest





## ACCESSORIES:



**Padded vinyl sheath case** with belt loop for any model T2. Great for desk or tool box spaces. \$ 12.

Note: The soft sheath case can be substituted for the standard hard case; simply specify with order. No Charge

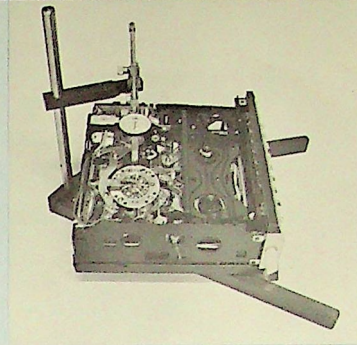


### **Field calibration weight set.**

Machined brass weights adjustable to one ounce increments from 1 to 20 ounces. Allows field calibrations to be made at specific tensions for improved accuracy; also allows field inspection to determine if scale accuracy is within factory specifications; complete with carrying case and illustrated instruction manual.

Model WS-120

\$ 49.

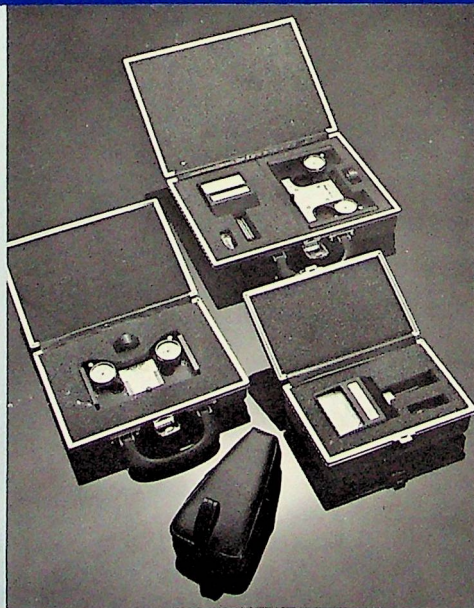


**Head protrusion gauge mounting stand.** For applications not having a convenient mounting location for the standard universal mounting clamp. Allows easy set up and use on the new Beta and VHS machines with plastic chassis; recommended for Betacam and Recam type recorders.

Model S1-

\$ 95.

## ORDERING INFORMATION:



All prices and specifications on this document are subject to change without prior notice

### **Shipping:**

**Orders within continental U.S.;** factory direct, units normally shipped Via UPS Surface; Add \$2.00 per unit for shipping. Premium delivery available upon request, consult Tentel for alternate shipping methods.

**Orders outside continental U.S.;** Distributors available for most foreign countries; please consult Tentel prior to ordering.

### **Tax:**

California residents add applicable sales tax. No sales tax collected outside California.

### **Terms:**

Net 30 to companies with approved credit or D&B rating of EE2 or better. Other: Can be Prepaid, C.O.D., or charged to Visa or MasterCard.



1506 Dell Avenue - Campbell, CA 95008, USA

Phone: (408) 379-1881

Toll-free phone: 1-800-538-6894

In the continental U.S., except California

TWX 910 590 8001