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BOOTH # C3942

# NAB NEWS

National Association of  
BROADCASTERS

# 2004

## TENTEL's 32th Year

### DVC-PRO Mechanical Test Kit



TENTEL continues to offer a COMPLETE **DVCPro** mechanical check out and repair package in a convenient attache tool case. We re-engineered almost half of the 30+ 'factory' tools for better set-up of DVCPRO transports. These TENTEL tools are easier to use, plus they are more accurate and less expensive than 'factory' tooling. The entire set comes in a handsome attache carrying case, with each tool and location conveniently marked with the 'factory' part number. This is a very complete repair kit. We've developed many NEW test tools, plus we offer an excellent 5 day training class.

### BETACAM TEST INSTRUMENTS

Even though HDTV and DTV are occupying the 'spot light' now, NTSC is going to be around for at least 10 more years! (Hopefully you already know this.) The 'cash-cow' Betacam machines are still making money. TENTEL offers test instruments to make these older machines work as good or better than new. You'll be happily surprised how proper tape tension, reel table height and reel table perpendicularity, torques, guide height, drum eccentricity, and head tip protrusion affect quality video output with less strain on tapes and nerves. Ask us about the 5 basic Betacam tools that work on all models.



### DVCPRO AND BETACAM TRAINING CLASSES



TENTEL **training classes**, provide short cuts and field proven repair methods, along with theory and instruction manual corrections. These are the most complete training programs available. We continue to add short cuts and improved methods. Classes held at your location or ours.

Classes range in length from 5 days for DVCPRO, to a 10 day BVW class. We use the 'factory' manual as a guide, not an absolute. See our testimonials, these are the BEST.

The "DT" series classes cover the Panasonic DVCPRO machines up to and including the AJ-D950. Course material developed and expanded by Tentel with the help of the same professionals who developed the factory training programs. The training program is normally a five day course DT-502 which covers compression theory, menus, block diagrams, head replacement using lista and auto EQ, and other electronic and mechanical set-ups. It may be expanded to a custom 8 day course covering camera repair at customer request. Call Tentel to discuss your needs and have a class custom tailored to your needs.

The "BT" series of programs are based on an expanded curriculum begun by the highly respected Ampex Corp. training school, and includes many aspects of current and older model Betacam transports **NOT** currently covered by "factory" training programs. The series includes classes on maintenance of BVW, PVW, and DVW Betacam machines.

These courses can be difficult to find elsewhere, but Tentel can bring one to your location, at your convenience; or host it for you at our facility in California.

## EngineeringTech-Tip: Spring type Tension Cassettes

TENTEL is celebrating our **32nd** year in the business of supplying test tools for magnetic tape transports. If spring tension cassettes would satisfy customer requirements, we would have developed one 32 years ago. Here are the main reasons **why the Tentelometer is still best...**

1. It is virtually impossible for users to **verify the accuracy** of a tension spring cassette.
2. A tension cassette actually measures the **torque** at the supply or take-up reel, **not the tension at the video head** where tape tension is most important.
3. A tension cassette can't evaluate the performance of the **tape tension servo** to determine if it's providing constant tension from beginning of tape to end of tape.
4. If a transport is displaying tape handling problems, insertion of a cassette, with a **spring inside** is almost certain to be **ruined** due to existing servo problems. With the TENTELOMETER you can **use a 'junk' work tape**, so if the machine is 'eating' tapes, it won't be munching an expensive test tool.
5. When the test tape does wear out, with the TENTELOMETER you simply use an easily available **standard work tape**, and you're ready to go; with field verifiable accuracy.
6. The same TENTELOMETER, T2-M30-P designed for DVCPPro will work on DVCAM and even on DV transports, no tension cassette has this **versatility!**

## Yes! The 'rumors' are true, many imported recorders develop capacitor problems...

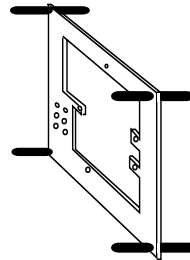
Tentel now distributes an excellent "In circuit" electrolytic capacitor tester. Easily shows good, marginal, and bad. It tests for DCR leakage and shorts, and measures ESR from .1 to 20 ohms. In line testing in 3 seconds is a real plus for troubleshooting circuit problems. Excellent value: \$175

## Yes! We Still offer Rebuilt Beta Drums for BVW, PVW, UVW

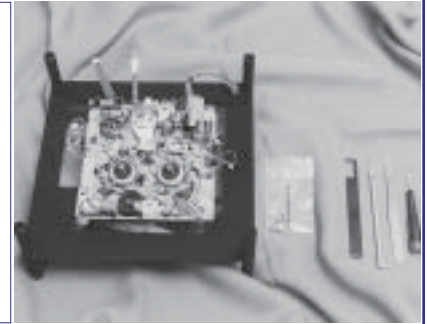
Save money, get better video performance. Next day delivery is typical. You can even use the TENTEL Head Protrusion gauge (HPG) and head Microscope (TMS-1) to help verify the quality of these heads; they **HAVE** to be good!

## NEW Test Fixtures for DVCPPro

TENTEL has developed several new tools for DVCPPro, after watching what students struggled with in the 5 day training class. We developed the 'Chassis Adapter Mounting Plates (CAMP) to hold the fragile chassis after removal from the machine. Our design allows easy access to all 6 sides of the chassis. We also developed a very handy 5 piece tool kit (CHAT) to provide help for changing the cleaning roller and spring, changing the video head, a tool to remove the 'cut' washers, and even a tool to help remove and re-install the fragile flat head cables. Mishandling of a head cable can be an \$800+ mistake! These NEW TENTEL tools make repairs easier and more cost effective.



DVC CAMP PLATE



## Use this check list for your application...

### DIGITAL S / VHS

- T2-H7-UM: TENTELOMETER®  
Tension Gauge
- TEST-VHS: Tension Evaluation  
Servo Test Cassette
- TSH -V5: Spindle Height/ Ref.  
Plane Gauge
- TQ-600: Dial Torque Gauge
- HPG-S: Head Protrusion /  
Eccentricity Gauge
- TT2: Video Training Tape

### BETACAM

- T2-H7-SLC: TENTELOMETER®  
Tension Gauge
- TSH-B7: Spindle Height / Ref.  
Plane Gauge
- TSH-B8-1: SP Ref.Plane gauge
- TAD-B: Guide Alignment Driver
- TQ-300M: Dial Torque Gauge  
(Motorized Drive)
- HPG-1: Head Protrusion /  
Eccentricity Gauge
- S2: Accessory Mounting  
Stand
- TMS-1: Head Microscope-35X
- TPS-B: Pulley & weight set
- TRP-B: PVW Tension Post
- TT-B: Betacam Training Tape
- BT-Series: Training Classes

### DVCPPro

- TENTEL offers a COMPLETE kit of DVCPPro test instruments. About 30 tools and test instruments in a convenient attache carrying case.
- T2-M30-P: TENTELOMETER®  
Tape Tension Gauge
- TSH-P1: Spindle Height / Ref.  
Plane Gauge
- TQ-80-P: Dial Torque Gauge
- T-1188: Tension servo arm  
force system
- VFK 1155: Tension servo test
- 1156, 1208: measuring blocks
- 0357, 0912: Special eccentric and  
post drivers
- VFK 1209: Torque driver
- VFK 1300: DAQ-12 A/D board
- CAMP 1 & 2: NEW chassis adapter  
mounting plates
- CHAT tools: New Chassis tool kit
- DT-502: DVCPPro 5 day Class

### U-MATIC

- T2-H15-SLC: TENTELOMETER®  
Tape Tension Gauge
- TSH-U9: Spindle Height/ Ref.  
Plane Gauge
- TQ-1800: Dial Torque Gauge  
with Motorized Drive
- HPG-1: Head Protrusion /  
Eccentricity Gauge

Toll FREE in the U.S. **800-538-6894**; SEE us at [www.tentel.com](http://www.tentel.com)

**TENTEL®**

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