
VIDEO HEAD TESTER

MODEL **YF-225 B/V**



YU PING

OPERATOR'S MANUAL

Thank you for your patronage. Before using this instrument, please read thoroughly the instruction manual to obtain best performance.

I. INTRODUCTION:

This instrument is a video head tester used for determining whether a video head is in good condition by detecting the wear state of the video head and indicating it on a meter. The meter indication will serve as a tentative guidance for confirming the wear state of the video head.

- Select the model applicable to the VTR system you are testing.
- YF-225V is a tester for the VHS system VTR.
- YF-225B is a tester for the BETA system VTR.

II. SPECIFICATIONS:

1. Measuring Range of Video Head

With a rotary switch for 3 ranges A, B and C measuring range of each system.

MODEL-YF225B (BETA)

	Measuring Range	Nominal Inductance of 0 Point
Range A	approx. 0.8 – 3.4 μ H	1.5 μ H
Range B	approx. 0.6 – 2.8 μ H	1.2 μ H
Range C	approx. 0.42 – 2.2 μ H	0.95 μ H

MODEL YF-225V (VHS)

	Measuring Range	Nominal Inductance of 0 Point
Range A	approx. 0.2 – 3.5 μ H	0.9 μ H
Range B	approx. 0.8 – 3.0 μ H	1.4 μ H
Range C	approx. 0.5 – 1.5 μ H	0.85 μ H

2. Measuring Frequency \approx 1MHZ
3. Measuring System Bridge measuring circuit
4. Power Supply 1pc of battery 006P 9V
5. Battery life about 10 hours

3. Measuring Procedures

- a) According to the procedures for replacing the video head disconnect the soldered leads from each video heads.
- b) Identify the type of video head and set the range selector switch positions A, B and C properly.
- c) Measuring method:
 - (1) Turn the power switch to "ON" position.
 - (2) Set the rotary switch at the "CAL.A, CAL.B or CAL.C" position.
 - (3) Adjustment "CAL.ADJ" potential and set the pointer at the "CAL" position on the meter scale.
 - (4) Disconnect the soldered leads at one side of the video head installed to the new replacing drum, and connect them to the measuring clips.
 - (5) When the rotary switch is changed from the "CAL.A, CAL.B or CAL.C" position to the "MEAS.A, MEAS.B or MEAS.C" position the range of pointer deflection indicate the measured values.

(Tables 1 and 2 are the pointer indication ranges of the new video head or worn video head).

4. Judgement of measured values.

The pointer deflects according to degree of wear of the video head. Make a judgment referring to the measured values shown in Table 2.




IV. OPERATION:

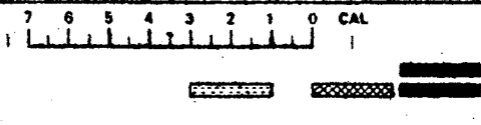
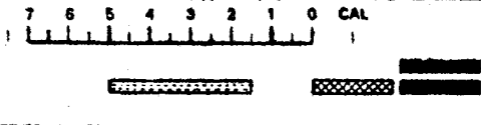
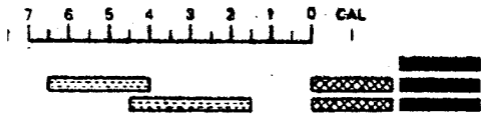
1. Before starting to check the wear state of a video head, perform the following works.
 - a) **Cleaning of the video head**
Cleaning the video head and tape travelling unit. Confirm the video head is not contaminated or clogged. (refer to the service manual available from the manufacturer).
 - b) **Checking of the coil and lead**
Using an ordinary Tester (use the resistance range of RX100 or RX1K) confirm continuity of the video head coils and leads.
 - c) **Visual check of the video head**
Prior to measurement, visurally check the video head for chipping. Because chipping on the video head cannot be measured.
2. **Adjustments of Video Head Tester**
 - a) **Adjustment of mechanical position of pointer.** When power switch is OFF. Confirm that the pointer of the video head tester is at the mechanical position. If not, adjust it by turning the pointer adjusting screw.
 - b) **Checking of battery Voltage**
Turn the power switch to the "B. CHE." position. If the pointer is in the "BATTERY" range, battery voltage is sufficient. If the pointer is outside the range, replace battery with new ones (006P DC9V)

Table 1. Example of New Video Head Indication Range

	YF-225V	YF-225B
A	3-4	1-2
B	3.5-5	1.5-5
C	3-4	4-6.5

Table 2. Range Selector and Measured Value

-  Deflection when new heads
-  Deflection when heads need replacing.
-  Deflection when heads are worn.

SYSTEM	RANGE	MEASURED VALUE
B	A	
	B	
	C	

SYSTEM	RANGE	MEASURED VALUE
VHS	A	
	B	
	C	

5. Battery replacement

- Put off the power switch.
- Take away the test clips.
- Loose screw and open the rear panel.
- Take out the batteries and replace them with new dry battery (S-006P 9V). After replacing the battery, check the battery voltage.
- Cover the rear panel back and screw.


6. Caution:

- As the range of pointer deflection somewhat differs depending upon the RANGE selector switch position A, B and C.
- If the video head coils or leads are shorted the pointer does not indicate the proper value but is kept above the red zone.

- c) If the video head coils or leads are disconnected, the pointer will be kept in the power OFF position and does not deflect at all.
- d) When the video head is contaminated, the pointer deflects corresponding to the degree of wear irrespective of contamination.
- e) Keep it away from high temperature, humidity or under direct sunlight.
- f) Be sure to put it off after use. for long storage, the battery should be taken out lest the leakage of battery liquid damage the interior parts.

7. Appendix

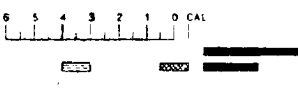
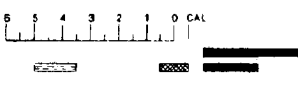
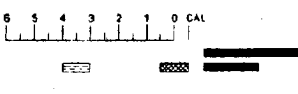
Range Selector and measured value

 Deflection when new heads

 Deflection when heads need replacing.

 Deflection when heads are worn.

VHS SYSTEM (I)

RANGE	ROTARY DRUM	MODELS		MEASURED VALUE
A	VEH0068	NV-8800, 5500	NV-8300, 8150 8600	
	VEH0116	NV-8600, 5000	NV-8310, 8160 8400	
	VEH0104 VH0124	NV-6200	NV-8200, 8170 NV-8410	
B	VEH0107	NV-6000	NV-8760	
	VEH0117	NV-3000, 3500 3300, 3700 3200	NV-8450, 8700 8650 8700(N) 8460, 8750	
C	VEH0063	Dx VCR		
	VEH0092	NV-9100, 9200, 9300		
	VEH0093	NV-9100		
	VEH0072	NV-9200A, 9240		
	VEH0101	NV-9200		
	VEH0064	NV-9100, 9100A, 9300, 9300A		
VEH0094	NV-9500			
		NV-9500, 9500A, 9600, AU-700		

VHS SYSTEM (I)

RANGE	MODELS	MEASURED VALUE
A	VT-3000 VT-3500	
	VT-4000 VT-5400 VT-4000R VT-5500 VT-5000 VT-6800 VT-5200 VT-5300 VT-7000	
B	VT-5600 VT-8000 VT-5800 VT-8500 VT-6500 VT-9100 VT-6800 VT-9400 VT-9700	
	VT-11 VT-12 VT-15 VT-16 VT-17 VT-7	
C	VT-15 VT-17 VT-M1 VT-7	

BATA SYSTEM (I) NTSC MODELS

RANGE	ROTARY DRUM	MODELS	MEASURED VALUE
A	DSR-12 DSR-17	ONLY Ch. B OF SL-5800 (RANGE B FOR ch. A)	
	DSR-16	ONLY Ch. B OF SL-2500 (RANGE B FOR ch. A)	
B	RSV-1A RSV-2D RSV-6 DSR-12, 17 DSR-16 DSR-27 DSR-20 DSR-26 DSR-33	FORMER DISC OF SL-6200, 7200, 7200A, SLO-260, 320, 340, SLP-100, 300, DPR-500 SL-8200, 8600, 3000, SL-230P(S) SL-5400, 5600 ONLY Ch. A OF SL-5800 (RANGE A FOR Ch. B) ONLY Ch. A OF SL-2500 (RANGE A FOR Ch. B) SL-2500 SL-5000 SERIES SL-5W, 5010, 5100, 5101 SL-2000 SL-85	
	RSV-4 DSR-09	SLO-323 B1 MACHINES AND ALL B1 REPAIR PARTS $\frac{1}{2}$ inch Umatic	

CCIR MODELS (INCLUDE DUAL TRIDENT MODELS)

A	DSR-21 DSR-22	SL-C9 SERIES SL-F1 SERIES	
	RSV-3A RSV-3B DSR-08 DSR-10 DSR-11 DSR-13 DSR-19 DSR-20 DSR-30	SL-8000 SL-8000 SERIES, SL-8080 SERIES VIDEO 2 SL-C7 SERIES, C5 SERIES, C6 SERIES, VIDEO 3, VIDEO 3S SL-T7, C5, VIDEO 7, VIDEO 2S SL-3000 SL-C5, C7F, AV-77F SL-T9ME SL-C6, SL-5000, SL-5100E, SL-5W SL-C6F	
C		$\frac{1}{2}$ inch Umatic	