

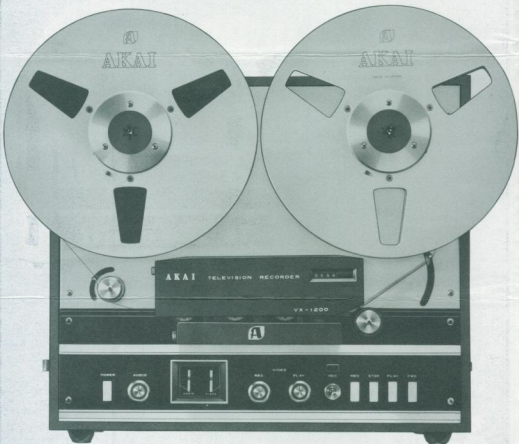


AKAI TELEVISION RECORDER

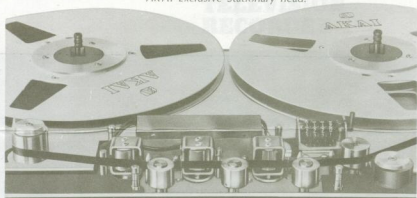


AKAI

AKAI TELEVISION RECORDER MODEL VX-1200



AKAI Exclusive Stationary head.



**Is this audio-tape recorder?
No, it is video-tape recorder.**

We have been constantly researching for the technical improvements for the Akai tape recorders.

In course of the technical study on tape recorders, we have come to succeed in recording the pictures on usual tape recorder. That is to say, we have now developed Video Tape Recorder VX-1200, of which system is just same as usual audio tape recorder, using the stationary head and $\frac{1}{4}$ " tape.

This is really the world-first achievement in the electronics field.

SPECIFICATIONS:

TAPE SPEED:	114 cm/sec. (45"/sec.)
TAPE WIDTH:	6.25mm ($\frac{1}{4}$ ")
SIGNAL SYSTEM:	United States Standard TV signal
VIDEO INPUT:	1.4 Vp-p (Synch. negative) 75 Ohm unbalanced
OUTPUT:	1.4 Vp-p (Synch. negative) 75 Ohm unbalanced
AUDIO INPUT: LINE	-10 dBs
: MICROPHONE	-50 dBs
AUDIO OUTPUT:	0 dBs
BAND WIDTH: VIDEO	400 Hz — 1 MHz
: AUDIO	100 Hz — 10 KHz
POWER SUPPLY:	117V 60 cycle
POWER CONSUMPTION:	110W
DIMENSIONS:	240×390×450mm ($9\frac{1}{2}$ "× $15\frac{1}{2}$ "× $17\frac{1}{4}$ ")
WEIGHT:	23 kg (50.6 lbs)

AKAI TELEVISION RECORDER

MODEL VY-1700

MANUFACTURED & DISTRIBUTED BY
AKAI ELECTRIC CO., LTD.
HIGASHI-KOJIYA, OHTA-KU, TOKYO, JAPAN.

AKAI

VX-1200

OPERATOR'S MANUAL
取 扱 説 明 書

Akai Television Recorder VX-1200

I INTRODUCTION

This television recorder has been developed by Akai, for the first time in the world with stationary head using a tape of 6.25 mm (1/4") in width.

Although its construction is basically the same as an audio tape recorder, its outstanding feature lies in its capacity to record and playback television (and ITV) pictures.

Model VX-1200 has numerous characteristic features uniquely designed by Akai's engineers. Thus it was possible to develop this model which has such a low tape speed as 114 cm/sec (45"/sec). These features include the use of sub-assembly system, the introduction of a Damping roller, an all ferrite head system, the special processing of recording signals (positive synchronous system), a synchronous separation system of reproduced signals, the processing of reproduced signals, a noise suppressor of synchronous signals, etc.

II SPECIFICATIONS

Tape speed	:	114 cm/sec (45"/sec)	
Tape width	:	6.25 mm (1/4")	
Signal system	:	United States Standard TV signal	
Video input	:	1.4 Vp-p (Synch. negative) 75 Ω	unbalanced
output	:	1.4 Vp-p (Synch. negative) 75 Ω	unbalanced
Audio input	:	Line	: -10 db
		Microphone	: -50 db
output	:		0 db
Band width	:	Video	400 Hz — 1 MHz
		Audio	100 Hz — 10 KHz
Power supply	:	120V	60 Hz
Power consumption	:	110 VA	
Dimensions	:	240 x 390 x 450 mm	
Weight	:	23 kg (50.6 lbs)	

III CONTROLS

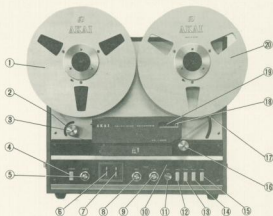


Fig. 1

VX-1200

- (1) Supply Reel
- (2) Tension Arm
- (3) Tape Guide Roller
- (4) Power Switch
- (5) Audio Level Control
- (6) Audio Meter
- (7) Video Meter
- (8) Video Record Level Control
- (9) Video Playback Level Control
- (10) Record Indicator Lamp
- (11) Record Interlock Button
- (12) Rewind Button
- (13) Stop Button
- (14) Play Button
- (15) Fast Forward Button
- (16) Pinch Roller

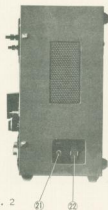


Fig. 2

- (17) Take-up Tension Arm (Safety Feature)
- (18) Reset Button
- (19) Index Counter
- (20) Take-up Reel
- (21) Microphone Jack
- (22) Multi-connector Jack

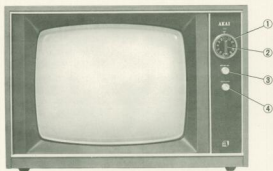


Fig. 3

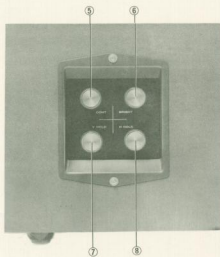


Fig. 4

TV-MONITOR

- (1) VHF/UHF Fine Tuning
- (2) VHF Channel Selector
- (3) Power/Volume Control
- (4) TV/VTR Selector
- (5) Contrast Control
- (6) Brightness Control
- (7) Vertical Hold Control
- (8) Horizontal Hold Control

IV OPERATION

Recording

- 1) Place the television recorder (VX-1200) at a horizontal position, and connect the VX-1200 to the TV monitor (VM-120) by using the attached multi-cable. The VX-1200 may also be used in a vertical position.
- 2) Connect the television antenna to the TV monitor.
- 3) Turn on the POWER SWITCH of the video tape recorder and the TV monitor.
- 4) Set the TV/VTR SELECTOR on the front panel of the TV monitor to TV, and adjust the VHF/UHF FINE TUNING of the TV monitor correctly.
- 5) Set the same TV/VTR SELECTOR to VTR.
- 6) Adjust the VIDEO RECORD LEVEL CONTROL in such a way that the video meter indicator comes roughly at the center of the red line.
- 7) Adjust the AUDIO RECORD LEVEL CONTROL in such a way that the audio meter indicator will not exceed the red line.
- 8) Then, put the tape on. Do not forget to put the tape on the TAPE GUIDE ROLLER. (For putting the tape on the TAPE GUIDE ROLLER, pulling the TENSION ARM fully down to the lower end will facilitate the process. If you press the PLAY BUTTON, the TENSION ARM will be automatically released.
- 9) Check to see that the tape is placed correctly, press the PLAY BUTTON, and then press the RECORD BUTTON. (Be sure at this time that the RECORD INDICATOR LAMP is lighted).
- 10) Before making an important recording, clean the heads with the attached buckskin.
- 11) For connecting the cable and placing the tape, see Fig. (1) and (5).

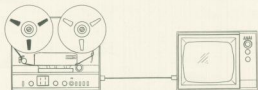


Fig. 5



Fig. 6

Playback

- 1) When the recording is over, press the **STOP BUTTON**, and then the **REWIND BUTTON** to rewind the tape.
- 2) When the rewinding is over, press the **STOP BUTTON** and after making it sure that the tape has stopped completely, press the **PLAY BUTTON**. (If you press the **PLAY BUTTON** while the tape is still moving, it will damage the tape.)
- 3) When playback is started, adjust the **VIDEO PLAYBACK LEVEL CONTROL** in such a way that the video meter indicator comes roughly at the center of the red line. (You can make this adjustment also by watching the picture on the monitor).
- 4) In stopping a rewind or a fast forward operation, pressing the button for the reverse mode to slow down the speed before pressing the **STOP BUTTON** will reduce the risk of injury of the precious tape.

In other words, press **THE REWIND BUTTON** for stopping the fast forward, and press the **FAST FORWARD BUTTON** for stopping

the rewind in order to slow down the tape speed before finally pressing the STOP BUTTON.

The recording and playback of audio and video signals can be made by the foregoing procedures. For recording from a microphone, insert the microphone into the MICROPHONE JACK on the side.

The recording and reproduction meter indication is adjusted the standard television signal. However, actually broadcast signals slightly differ from channel to channel. For this reason, make the following adjustment of the video record level in the following cases:

1. When the video S/N is poor:
Increase the video record level to a proper level.
2. When pictures are distorted despite good video S/N.
Decrease the video record level to a proper level.

V MAINTENANCE

- i) The video head is made of ferrite. For this reason, do not let anything hard hit upon it. If dust gets on the video head, it will hinder normal recording and reproduction, causing blurring of reproduced pictures.

In such a case, wipe the front surface of the video head with the attached buckskin. If this step is not sufficient to repair the hindrance, put the attached 3" green cleaning tape and operate the machine in the playback condition until the tape runs out. This tape, however, should be used sparingly. It can be used only up to about five times.

LUBRICATION

Oil the pinch roller shaft with light machine oil at every end of 1,000 hours of operation.

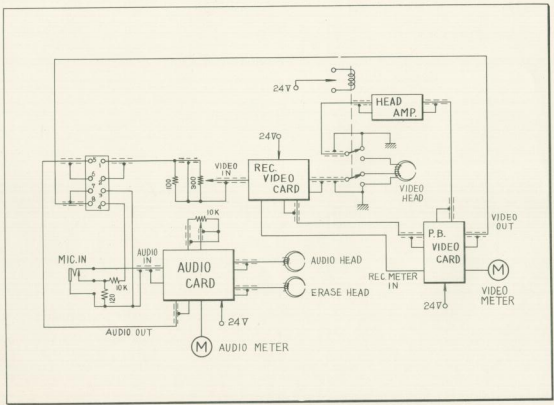
VI TAPE

The surface of the video head is polished to be quite smooth and flat. If the surface gets rough, it will in extreme cases, blurr video reproductions and decline the output level.

The surface of the video head is liable to get rough when other types of magnetic tapes than the specified one are used, particularly those with rough surfaces. For this reason, use the attached magnetic tape or Scotch #951.

VII OPTIONAL ACCESSORIES

- i) branching cable for recording external television signals such as camera signals, etc.
- ii) 30 ips capstan
- iii) microphone





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