

YAMAHA K-700

Natural Sound Stereo Cassette Deck

Automatic Reverse with Fast-Response Optical Tape-End Detector

Programmable Recording and Random Playback

Sendust Rotary Record/Playback Head System

Auto-Fade at Tape End and Beginning of Second Side

Remaining Tape Time Display, Linear LED Tape Counter

Blank Skip, Intro Scan, Auto Source Change Functions

Dolby B/C Noise Reduction*



Behind the Superior Yamaha Sound

Yamaha's foundation as a manufacturer spans more than a hundred years in a number of specialized fields. Since the company began as a producer of reed organs, it has expanded steadily until today, Yamaha music instruments, sound reinforcement gear, music education and popularization programs, motor products, sports equipment, and of course, audio products, are renowned worldwide for their highly refined performance. Naturally, the many years spent in intensive

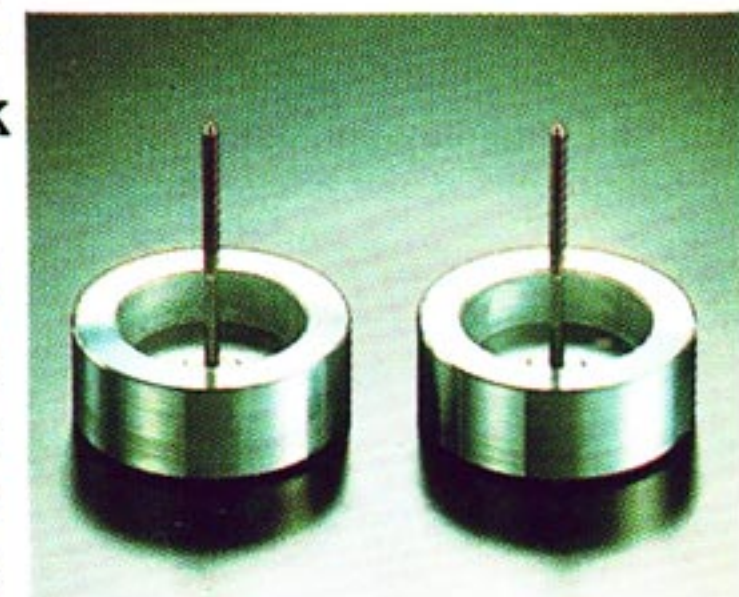
HIGH-PRECISION AUTO REVERSE AND SOPHISTICATED MICROPROCESSOR CONTROL MAKE YAMAHA NATURAL SOUND EASIER THAN EVER TO ENJOY

Meet a unique addition to the highly acclaimed Yamaha natural sound cassette deck line—the versatile K-700. Not only does it incorporate many of the same technologies developed for Yamaha's top-line reference quality decks, ensuring excellent audio quality, but it also features many newly developed microcomputer-controlled functions and a special Auto Reverse system, which provide outstanding operational ease and convenience. It has long been Yamaha's policy to introduce only features that contribute directly to better audio performance or improved operation. And until now, Yamaha audio engineers did not consider auto reverse systems accurate or reliable enough to be used in a

AUTO REVERSE CONVENIENCE WITH THE RENOWNED YAMAHA NATURAL SOUND

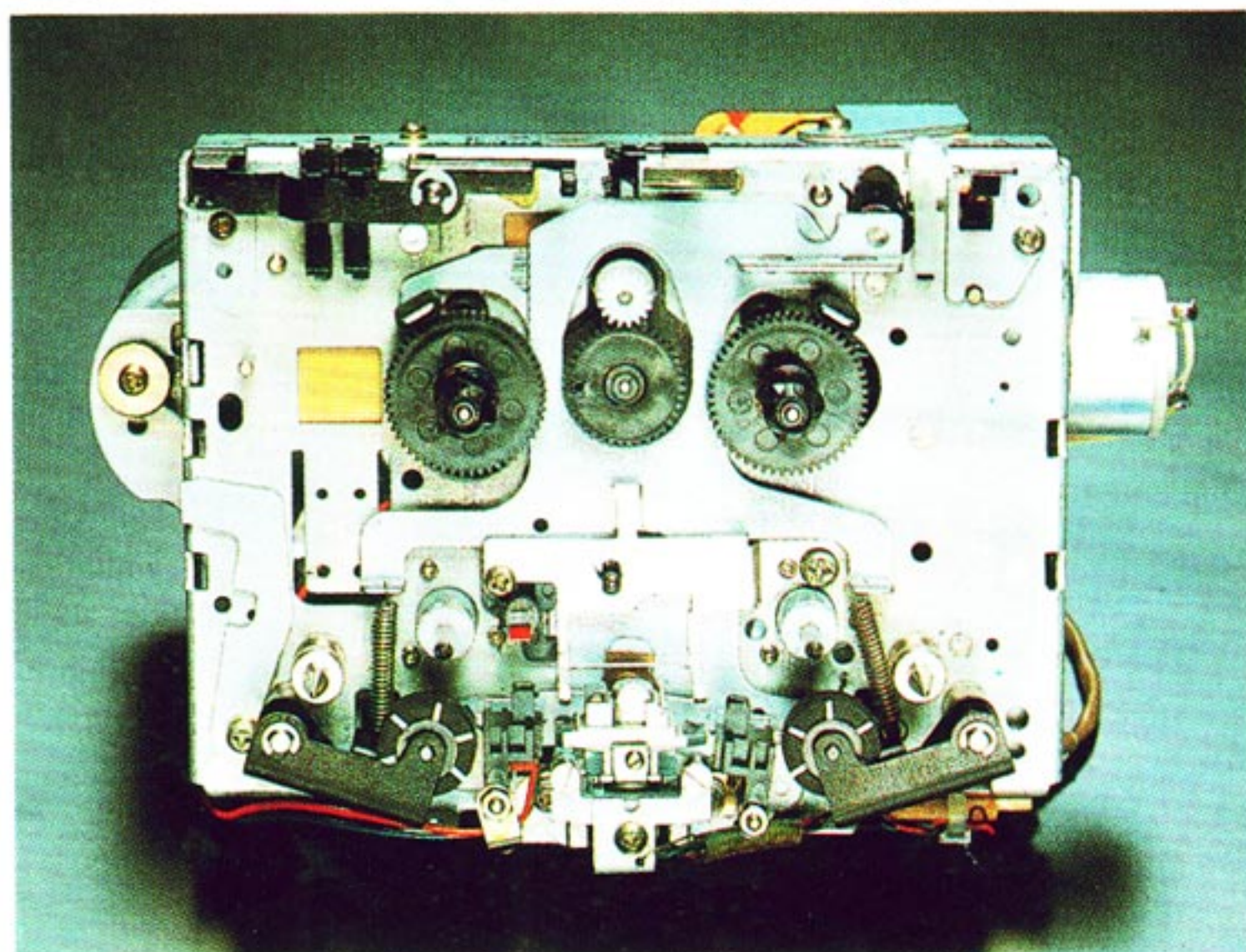
Auto Reverse REC/PLAY (Quick Reverse)

In auto reverse systems, tape travel is automatically reversed when the end of a side is reached, continuing recording or playback on the opposite side. Unless head alignment is perfectly maintained as the tape travels back



Precision-Machined Flywheels Are Identical So That Performance Is Equally Superb In Both Directions

Precision Auto Reverse Transport System



research and development in all these fields has resulted in a vast and varied store of technology. Moreover, the finely balanced interrelationship between the many Yamaha in-house technologies, production facilities and product groups creates a highly efficient network that makes it possible to achieve optimum quality and performance in every product.

Yamaha audio know-how, however, does not stop at technology. Each and every new audio product must face the most demanding challenge imaginable: the critical ears of Yamaha music instrument designers. Unless the reproduced sound is exactly like the real thing, the product is not considered finished. Yamaha gives you vast technology tamed by musical sensitivity—a claim no other audio manufacturer can honestly make.

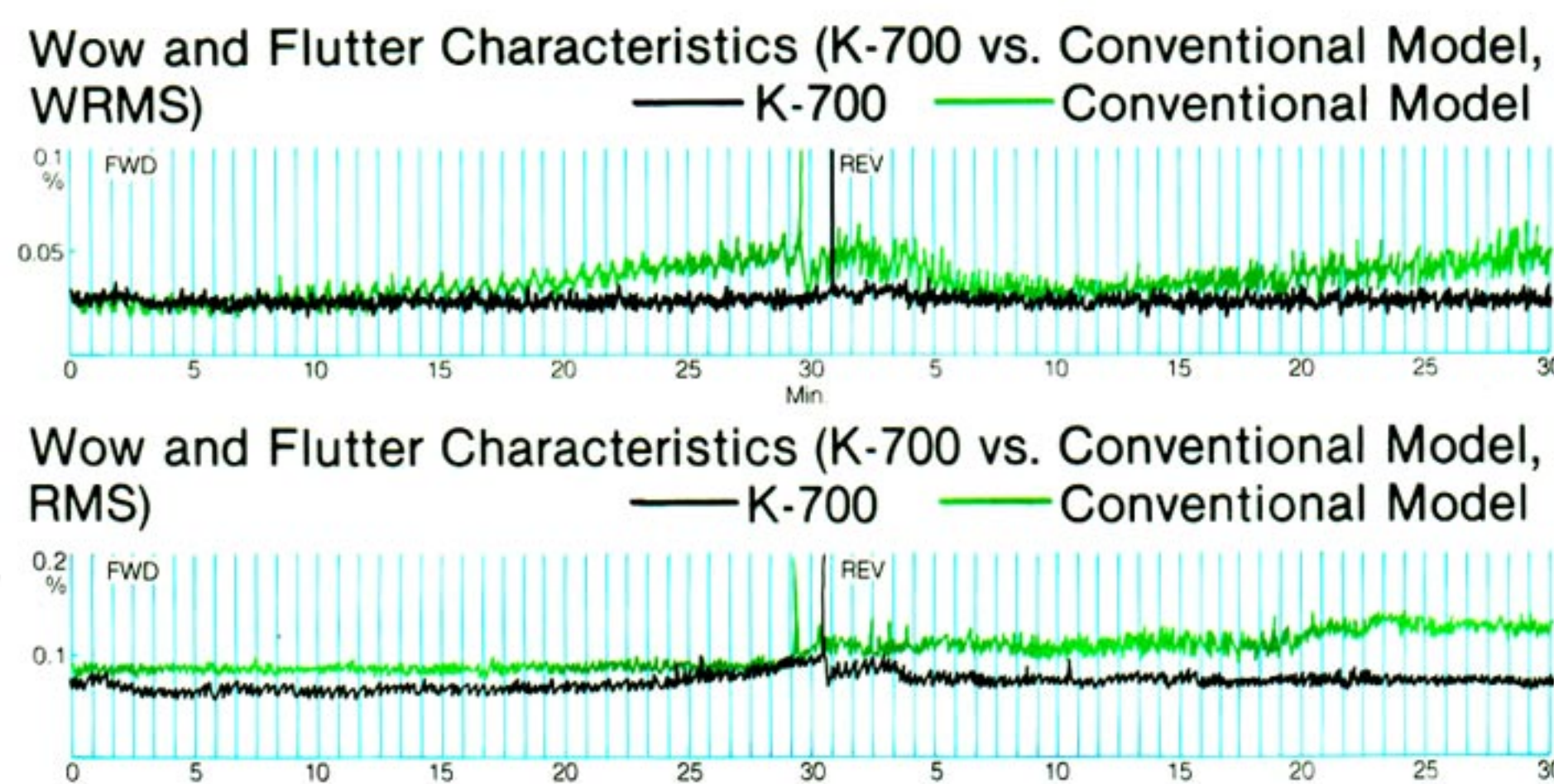
Yamaha cassette deck. Instead, they waited until Yamaha's own special rotary head was perfected, providing the convenience of auto reverse and the superb sound quality for which Yamaha has become famous, with no compromise in reliability.

At the same time, major advances in microcomputer control and new "mechatronics" made it possible to complement the Auto Reverse system with an impressive array of new operating features, like programmable recording and playback, automatic fade-in/fade-out, and remaining tape time indication. As a result, the K-700 is more than an outstanding new Yamaha cassette deck. It's an important step forward in total

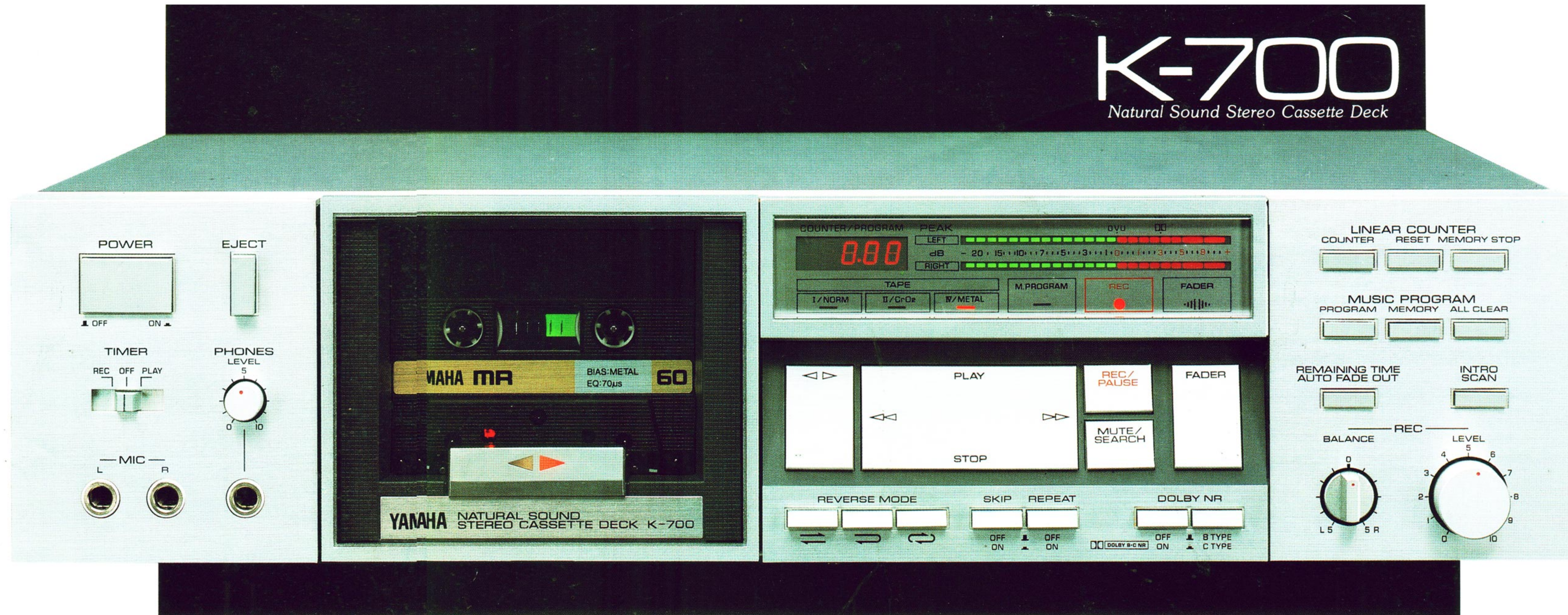
and forth, however, sound quality can actually vary between sides A and B of the tape. To avoid this, Yamaha developed a special high-precision rotating head mechanism that permits precise, independent adjustment of head azimuth in both directions. The head itself is the same pure Sendust type used in Yamaha's top-line decks. The result is true "reference quality" sound reproduction, superior to that of other auto reverse decks. Reverse is almost instantaneous, too, thanks to a special optical tape-end sensor system.

Unique 2 + 1 Motor Transport Drive

Yamaha's exclusive 2-motor transport system utilizes separate motors to drive the reels



As these two comparisons show, conventional auto-reverse models suffer from increased wow and flutter after they reverse (right hand side of graph). The K-700, however, maintains its superior characteristics.



cassette deck performance, combining highly accurate sound reproduction with futuristic operational flexibility. What that means to you is a deck that's not only a pleasure to listen to, but one that's easier and more fun to operate as well—the very definition of pure musical enjoyment.

and capstan during both recording and playback, and thus has set the industry standard for flawless transport performance and perfect head-to-tape contact. In the K-700, we've supplemented this system with another special motor that does nothing but rotate the head, significantly reducing tape reversal time.

ADVANCED CONTROL FOR EASIER, MORE ACCURATE RECORDING

When you want to make a tape for your application—whether it be for use in your car audio system or just a compilation of your favorite music—there are a number of "technical" problems that must be faced. Is there enough recording time left for one more selection? You have to stop and start the deck and fuss with the turntable every time you want to skip a selection on a disc being recorded.

And how about that annoying abrupt gap in the music that normally occurs if you record from one side of a tape to the other on an auto reverse deck? Yamaha's latest microcomputer circuitry incorporated in the K-700 has all the answers

with an incredible array of features that bring more convenience and flexibility to every recording situation—and that means easier, more accurate recording for you.

15-Selection Program Recording

Consider the way you make tape recordings now. You set up the deck, start the source, start recording, stop the deck when an unwanted selection comes up, reset the source ...on it goes. Not with the K-700. Suppose you only want to record certain selections from a source—a record, another tape, even a compact disc—while eliminating others. Just program the K-700 with the numbers of the selections you want. It will automatically go into the Rec/Pause mode when a non-programmed selection begins playing. So you just sit back—and let the K-700 take care of complicated recording chores for you!

Remaining Tape Time

How much tape—and taping time—have you wasted when your tapes have ended before the selection is over? Now, how would you like to know exactly how much recording time remains on the tape? With the K-700, you will know, at a glance. By pressing the Remaining Time/Auto Fade Out button at any time, the tape is automatically advanced to the end, rewound to a point just following the last recorded selection on the tape ready to record the next selection, and the remaining tape time is displayed on the LED indicator. When you resume recording, the remaining time is counted down on the display. No more guesswork, no more retakes, no more long tape blanks. Further, when you use the Remaining Tape Time function a unique auto Fade Out feature is activated. This function will automatically fade out as the end of the tape is

reached, then fade back in after the tape is reversed on the opposite side—no more jarring breaks at the ends of tapes.

Auto Fade-In/Fade-Out

In addition to the automatic fader function offered with the Remaining Tape Time feature, the K-700 permits insertion of smooth, professional-sounding fade-ins or fade-outs at any point during recording, using the special FADER button.

Rec Return

What if you want to start a recording over, or readjust record levels? Just push the Rewind button while recording (press Fast Forward while recording in the reverse direction). The K-700 automatically returns to the point where the selection began and waits in the Rec/Pause mode. Now you don't have to reset the deck every time you change your taping plans.

THE MICROCOMPUTER WAY TO MORE ENJOYABLE LISTENING

As with recording, there are a number of operational inconveniences that can mar your listening pleasure. If you want to listen to certain selections only, you have to individually locate each one in sequence. And locating those selections can be a problem, too. In the K-700 microcomputer control brings automated convenience to playback, for hands-off, feet-up listening enjoyment.

15-Selection Random Program Playback

With the K-700, you don't have to listen to the tape the way it was recorded. Instead, you can program the deck for playback in any order, starting from any position on the tape—up to 15 selections in all. When one

selection is finished, the deck quickly moves to the next and begins play automatically—no more fishing around the tape to find just the selections you want.

Intro Scan

You can review an entire tape quickly and automatically on the K-700 with just a push of the Intro Scan button—the first ten seconds of every section will be played back for fast, easy location of any desired selection.

Search

Here's another great convenience feature. At any point on the tape, you can automatically advance the deck to the beginning of the next selection merely by pressing the Mute/Search and FF buttons, or return to the beginning of the current selection by pressing the Mute/Search and REW buttons, at which time playback of that selection will begin.

Blank Skip

With the K-700, you don't have to manually advance the tape at the end of a side. When the deck senses a blank space of 15 seconds, it automatically advances to the beginning of the next selection. If that selection is on the reverse side, tape travel is reversed and playback resumed from there.

Repeat

This function works in two ways: when the deck is in the programmed playback mode, the entire program is repeated when this switch is engaged. When deck is not in the program mode, this switch can be engaged during play of any selection to initiate automatic repeat playback of that selection. The program or selection is repeated 16 times and then the transport stops—a much more practical approach than decks that literally repeat indefinitely.

Memory Stop

With most tape decks, the memory function is engaged at the counter's 0000 position. With the K-700, you can set the memory position at any point on the tape by pressing the Memory Stop button, allowing you to engage the memory function without losing track of the tape's elapsed time.

Auto Source Change

When a tape is finished, how would you like to enjoy uninterrupted music without touching the tape deck or amplifier? Now it's possible. When another program source is connected to the K-700's line input, it will automatically fade in and begin playing—a real convenience for a wide variety of listening situations.

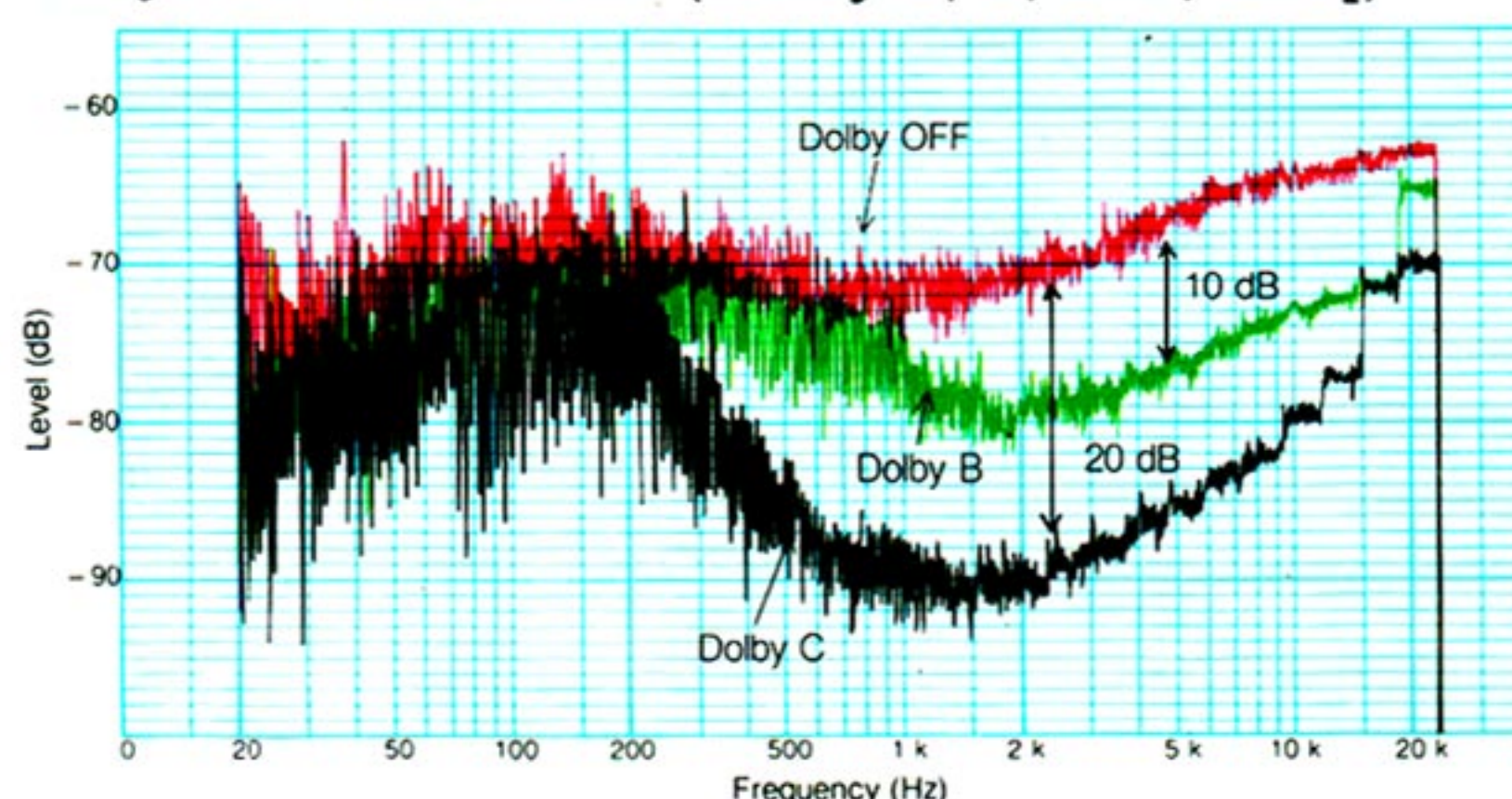
FEATURES FOR SUPERIOR SOUND

Dolby B/C Noise Reduction

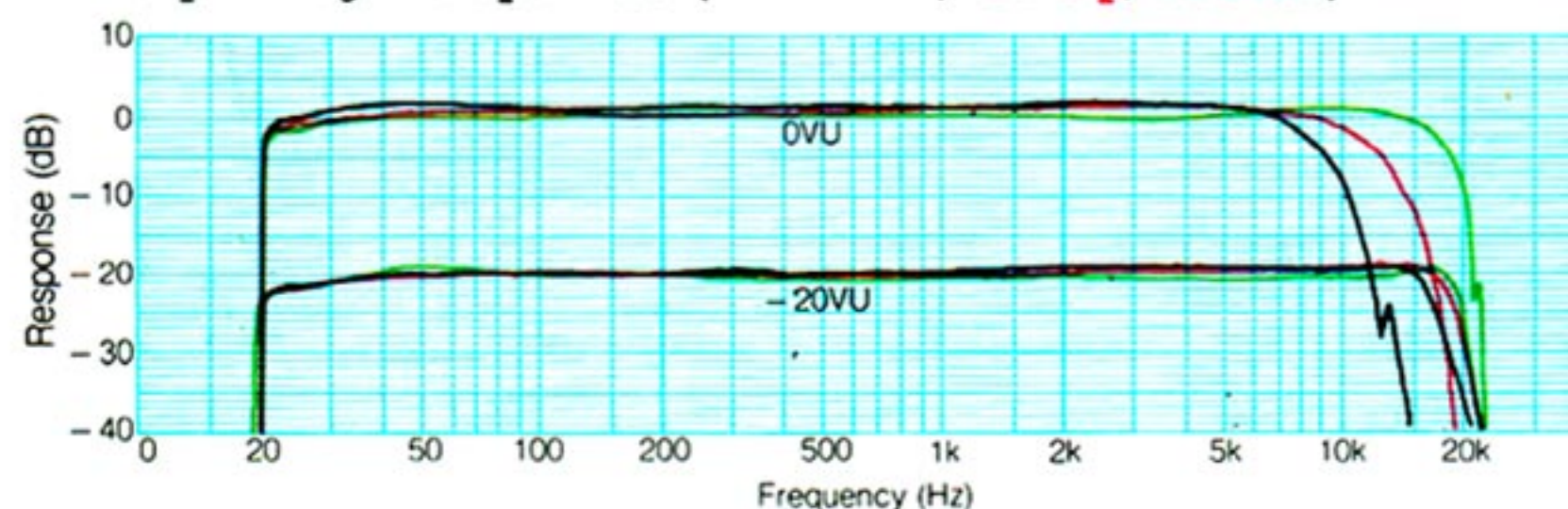
Because of its effectiveness in raising the S/N ratio and reducing tape hiss, Dolby B has been the noise reduction system of choice in the audio industry for years. Recently, Dolby introduced a new "C" NR system which provides double the noise reduction power over a wider frequency range, virtually eliminating noise to achieve new levels of sound reproduction performance. The K-700 incorporates both systems, so you

can play tapes previously encoded in Dolby B, or record and play back tapes with the new Dolby C encoding.

Playback Noise Level (Dolby C/B/OFF, CrO₂)



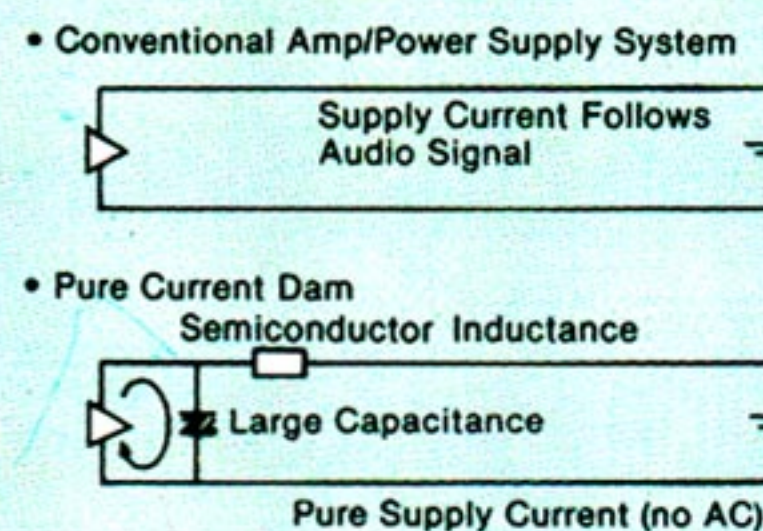
Frequency Response (Normal/CrO₂/Metal)



Yamaha Pure Current Dam

This unique Yamaha circuit innovation significantly improves reproduction accuracy by eliminating a common cause of distortion. The Pure Current Dam system effectively prevents audio modulation of the power supply line so the signal cannot leak to other parts of the circuitry, including the other channel, causing intermodulation distortion and increased crosstalk. The Pure Current

Pure Current Dam Principle



Dam system employed in the K-700 playback amplifiers contributes to remarkably pure music reproduction quality.

Auto Tape Selector

Missetting tape types is a thing of the past. When you load a tape, a sensing system automatically determines its type—Normal, Chrome, or Metal—and sets the deck to the proper bias, level, and equalization parameters for optimum performance.

RS-15 Remote Control Unit (Optional)

This optional remote control unit adds even more control convenience to your K-700. Using the RS-15, all control functions can be operated from the comfort of an easy chair. With the K-700 and RS-15 working together, listening convenience and operational flexibility are truly unsurpassed—there's just no performance available in a "competitive" deck that can match it.

Other Features

- 12-segment LED meters
- Timer record/playback
- Headphone level control

K-700 SPECIFICATIONS

Track Configuration	4 track, 2 channel stereo
Motor	DC servo motor (capstan); Flat torque DC motor (reel); DC motor (mech.)
Head System	Sendust rotary rec/playback head system: double gap ferrite erase head
F. Fwd/Rew Time	70 sec.
Wow & Flutter	WRMS/W.PEAK less than 0.04%/less than ±0.08%
Signal-to-Noise Ratio	
(Dolby off, CrO ₂ tape)	better than 59 dB
(Dolby B on, CrO ₂ tape)	better than 67 dB
(Dolby C on, CrO ₂ tape)	better than 75 dB
Frequency Response (-20 dB)	
Normal Tape	30—16,000 Hz ±3 dB
CrO ₂ Tape	30—18,000 Hz ±3 dB
Metal Tape	30—19,000 Hz ±3 dB

Total Distortion	
Normal Tape	less than 1.0%
CrO ₂ Tape	less than 1.0%
Metal Tape	less than 1.0%
Input Sensitivity/Impedance	
Mic	0.3 mV/5 k-ohms
Line	60 mV/47 k-ohms
Output Level	
Line	350 mV/47 k-ohms
Phones	1.3 mV/8 ohms
Power Supply	Matched to supply voltage and frequency of each area
Power Consumption	20 W
Dimensions (W × H × D)	435 × 113 × 285 mm
	17-1/8" × 4-1/2" × 11-1/4"
Weight	5.5 kg (12 lbs. 2 oz.)

Specifications subject to change without notice. *TM Dolby laboratories Licensing Corp.

NATURAL SOUND CASSETTE TAPE

Music Tape for Music Lovers

Yamaha offers five kinds of cassette tape for every type of music recording application, each available in 60 and 90 minute lengths. Each provides highly accurate reproduction of all types of music, with low distortion and wide dynamic range.

A Perfect Tape for Every Need

- MR** 60/90 min., Bias: Metal (IV), EQ: 70 μ s
For Reference Quality Music Recording
- CR-X** 60/90 min., Bias: High (CrO₂ II), EQ: 70 μ s
For Top-Priority Music Recording
- CR** 60/90 min., Bias: High (CrO₂ II), EQ: 70 μ s
For Selected Music Recording
- NR-X** 60/90 Min., Bias: Normal (I), EQ: 120 μ s
For High-Fidelity Music Recording
- NR** 60/90 min., Bias: Normal (I), EQ: 120 μ s
For Universal Music Recording



For details please contact:

SINCE 1887



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