

YAMAHA

Ti
TITANIUM SERIES

KX-W602 *RS*

Natural Sound Stereo Double Cassette Deck

© beim Hersteller
Archiv Michael Otto





Quality and Convenience

The Yamaha KX-W602, a dual Rec/Playback automatic reverse deck is a superior source component with a no-compromise design. It has all the features of other double cassette decks—and a whole lot more—to give you stable high-quality sound.

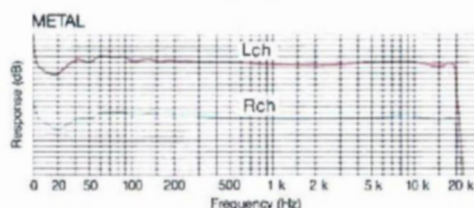
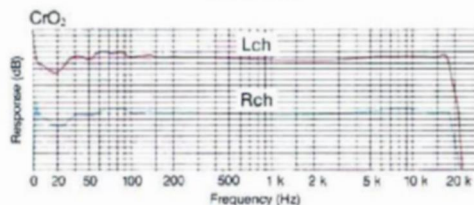
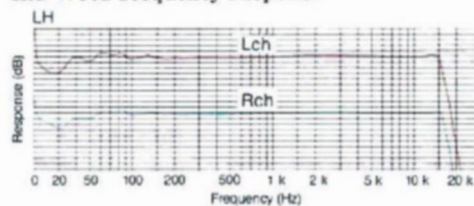
Yamaha has included only the best in the KX-W602, such as the highly regarded amorphous recording/playback heads for unsurpassed sound quality. Along with the finest heads, Yamaha uses the best 2-motor tape transport mechanism ever designed. And high quality operational amplifiers are included, to produce sound that is unsurpassed.

There is even more in the KX-W602, as Yamaha has included some of the finest currently available sound enhancing features. In addition to the conventional Balance and Recording Level Controls, there is the Dolby® HX Pro Dynamic Servo, as well as both Dolby B and Dolby C Noise Reduction Systems.

Of course, operational design is of the best quality too. The KX-W602 has a concentrated LCD Display, with a linear 4-digit Counter/Timer and a 13-segment

Peak Level Meter. Not only can both decks be used in tandem for playback of two cassettes, but dual recording is also possible on both sides of both cassettes.

KX-W602 Frequency Response



Dubbing is extremely simple—requiring only simple operations. And for those in hurry, Yamaha offers a high speed dubbing mode. Other features, such as Music Search, Random Program Play, and Intro Scan, are also top-of-the-line.

For further operational ease, the KX-W602 includes a multi-function Remote Control unit and is full-compatible with Yamaha's exclusive RS Integrated Remote Control.

Record/Playback Optical Quick Auto Reverse

Not only does the KX-W602 allow you to record and playback cassettes in both directions, Yamaha added the extra value design of Auto Reverse on both decks. With these decks you can automatically record or playback both sides of a tape for sound quality without compromise. This is because no matter which way the tape is moving, the rotating head assemblies are very accurate.

Concentrated LCD Display

The display on the KX-W602 was designed to center its functions in one place so you do not have to search around to see what mode you are in. The concentrated LCD display has the usual mode indicators and, to help you set the optimum recording level for each tape, includes a 13-segment Peak Level Meter. Another feature is the linear 4-digit Counter with a Timer display for accuracy in locating selections.

Only in a Yamaha *The reproduction of sound is a commitment that begins and ends with music. A challenge that is met not only in the laboratory, but in the recreation of the human feelings and emotion that are the ultimate test of music.*

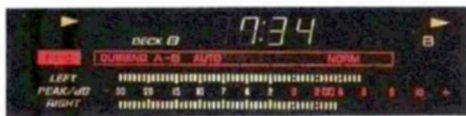
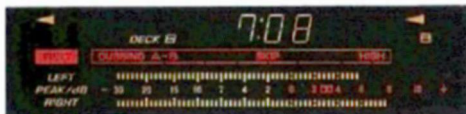
At Yamaha, we take the commitment seriously. That's why we're specialists in contemporary technologies. We custom design and manufacture LSIs that are the standard of quality for digital sound in both electronic musical instruments and compact disc players. We develop new metals and synthetic materials that recreate the rich acoustic properties of more traditional materials, meeting the stringent requirements of high-performance electronics. And we draw on our skill in craftsmanship, the result of a century of experience in making fine musical instruments, to ensure a special standard of quality in both sound and styling.

A standard of quality found only in a Yamaha.

Convenient Dubbing

The KX-W602 design lets you easily dub tapes in 4 different ways at either normal or high speed preferences—and no matter what you choose the result will be superb.

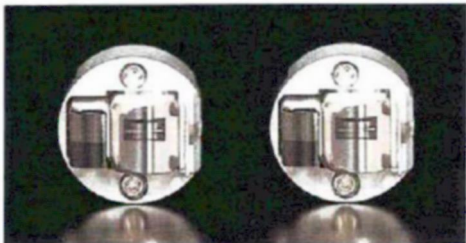
- 1) Manual Dubbing—to edit while you dub.
- 2) Full Auto Dubbing (Normal or High Speed)—to copy both sides of an entire tape with synchro-start.
- 3) Skip Dubbing (Normal or High Speed)—to eliminate blank spaces longer than 15 seconds. Inserts a 4 second blank to conserve tape time and allow the Search function to work.
- 4) Random Program Dubbing (Normal or High Speed)—to copy only your desired selections, in any order, and produce a custom tape.
- 5) High Speed Dubbing—to make copies at twice the normal speed.



LCD Display

Amorphous Record/Playback Head

Both decks on the KX-W602 are equipped with Amorphous Record/Playback heads. These high-quality heads are composed of 12-layer wear-resistant laminated amorphous material. This no-compromise design lets you record and listen to music that is excellent in sound quality,



High-quality Amorphous Recording and Playback Heads

with a minimum of distortion and with exceptionally low noise. The KX-W602 further comes with a high-quality exclusive amplifier for no-compromise in sound. The frequency response is 20-20,000 Hz (metal tape). And the S/N ratio is 74 dB (Dolby C NR on) with less than 0.8% distortion.

Bi-Directional Intro Scan

Bi-Directional Intro Scan, on both decks of the KX-W602, makes finding a specific tape selection very easy. Simply press a key and the tape automatically fast winds—in either the forward or reverse direction—to the beginning of a selection, plays for approximately 15 seconds, then fast winds to the next. When you hear the selection you want, just press the Play key to resume normal playback.

Relay Record and Playback

With the Relay Record and Playback continuous music can be enjoyed. Since the two decks can be used in tandem with relay record, you can record or play two full tapes worth of music automatically for a total of 3 hours on a standard C-90 cassette tape. And with the relay play, the KX-W602 will automatically repeat a sequence up to 8 time, allowing 24 hours of continuous music.

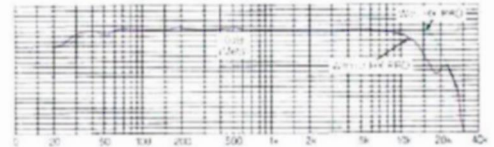
Full-Logic 2-Motor Transport

The Yamaha no-compromise design for the KX-W602 continues with the specially designed tape transports. Both transports use a full-logic mechanism and 2 motors completely relieving the capstans from having to drive the takeup reels. The result is smooth, stable tape travel, with exceptionally low wow and flutter.

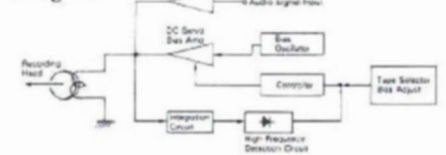
Dolby® HX Pro Dynamic Bias Servo

This unique system effectively extends available tape headroom through a dynamic bias servo system which automatically compensates for the tendency of high frequency signal content to act as bias on itself during recording. When this occurs it adds to the fixed bias level set for each type of tape, producing momentary over-bias conditions which can cause tape

HX Pro Frequency Response Diagram



HX Professional Dynamic Bias Servo Block Diagram

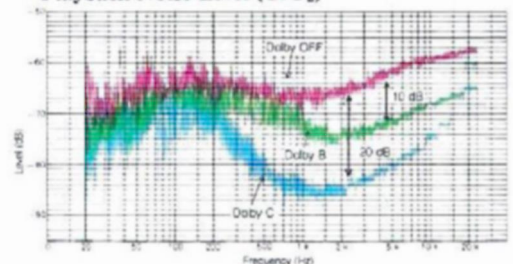


saturation. In addition to losing high-frequency headroom there is considerable intermodulation distortion. The Dolby HX Pro circuit, however, monitors effective bias in real time and automatically compensates for excess bias introduced by the music signal by reducing the deck's bias level accordingly. The system operates independently on each channel and no decoding is required during playback. The result is greatly extended recording headroom, letting you maximize the performance of every tape you use.

Dolby® B/C Noise Reduction

To minimize tape hiss and improve sound quality even more, both Dolby B and Dolby C Noise Reduction Systems are included on the KX-W602. With Dolby B NR your existing tape collection and other cassette systems not equipped with Dolby C NR are fully compatible. With Dolby C NR you can make recording that are cleaner and more noise-free, for the best possible sound quality. Dolby C NR complements Dolby HX Pro when recording wide dynamic range compact discs and other digital audio sources.

Playback Noise Level (CrO₂)



Also available in black

Auto Rec Mute

For convenience when you are recording from a radio and don't want to include a segment of a broadcast, the KX-W602 has an Auto Rec Mute. This function allows you to insert a four second blank space anywhere on a tape, as well as to insert the blank spaces necessary for the Auto Search function to operate correctly.

Direct Music Search

Because it is always difficult to locate a selection in the middle of a tape, Yamaha has included a Direct Music Search on the KX-W602. This function makes it very easy to locate any selection you want. By pressing the Search button and the FF or REW button together, the tape will wind to the beginning of the next or current selection and start normal playback. If that selection is not the one you want, repeat the process to move through the tape. What's more, with the included remote controller, you can press the numbered buttons for instant playback by skipping up to 99 selections.

Auto Tape Selector

Since setting the proper tape bias is something we often forget, Yamaha does

it for you. The KX-W602 automatically adjusts itself for the optimum bias and equalization for the tape that is put in the deck.

Rec Return

The uncompromising design of the KX-W602 allows you to make perfect recordings easily. If you make a mistake while recording, the Rec Return function allows you to rewind the tape to the exact point where the recording began. You can then correct the problem or make any adjustments that are necessary and restart the recording from the same point.

Remote Control Unit

The Yamaha no-compromise design also extends to the comfort of your favorite chair, because the KX-W602 comes with a full-function Remote Control. You can easily operate both decks and perform all major operations such as: Bi-Directional Intro Scan, Direct Music Search, Remaining Time Display and 9-Selection Program Rec/Play—all without leaving your seat.

RS Integrated System Remote Control

By connecting the KX-W602 to an RS compatible Yamaha receiver or stereo

amplifier, the recording and playback functions of both decks can be controlled by that remote control unit. The RS Integrated Remote Control is another no-compromise convenience from Yamaha. This system lets you use one remote control unit to operate all of your audio components.

Other Sophisticated Features

The KX-W602 makes listening and recording simple and enjoyable. Full Logic Control allows you to change operations without having to press the Stop button first. Random Program Play lets you select the music you want to listen to, in the order you want. Level and Balance Controls let you make the optimum settings, to tailor your recordings to your desires. A Reverse Mode Selector allows you to set how you are going to play or record your tapes.

Other Features


•Reverse Mode Selector •Timer Rec/Play Capability •MPX filter Switch •Remaining Time Display •Front Panel Headphones Jack

KX-W602 SPECIFICATIONS

Track Configuration	Auto reverse 4-track 2-channel recording and playback stereo Double cassette deck
Motors	Capstan: DC servo motor x 2 Reel: DC flat torque motor x 2
Heads	Rec/PB: Amorphous x 2 Erase: Double gap ferrite x 2
Fast Winding Time	About 90 seconds (C-60)
Wow & Flutter	W Peak No more than ±0.08% WRMS No more than 0.05%
Signal-to-Noise-Ratio	(Dolby off) Better than 58 dB (Dolby B on) Better than 66 dB (Dolby C on) Better than 74 dB

Frequency Response (-20 dB)	
Normal Tape	20—16,000 Hz ±3 dB
CrO ₂ Tape	20—18,000 Hz ±3 dB
Metal Tape	20—20,000 Hz ±3 dB
Harmonic Distortion	No more than 0.8%
Channel Separation	More than 40 dB
Crosstalk	More than 55 dB
Input Sensitivity/Impedance	
Line	50 mV/50 k-ohms
Output Level	
Line	360 mV/1 k-ohm
Phones	0.1 mW/8 ohms
Dimensions (W x H x D)	435 x 117 x 271.5 mm (17-1/8" x 4-5/8" x 10-11/16")
Weight	5.5 kg (12 lbs. 2 oz.)

Specifications subject to change without notice.
*HX Pro, Dolby B NR and Dolby C NR are trademarks of Dolby Laboratories Corporation.

The  symbol indicates compatibility with all Yamaha integrated remote system control receivers and integrated amplifiers.

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