

# JVC

## STEREO CASSETTE DECKS



Another Step Closer to Reality



## JVC Cassette Decks — Engineered for Performance, Convenience and Sound Quality

Superior performance specifications; Special convenience features; Superb sound quality. These are the goals — the "S" Solutions — we set for every stereo cassette deck we design. In each of the engineering areas discussed below, we have applied all the technological resources available to us to overcome the inherent shortcomings of the cassette format and, at last, achieve genuine high fidelity performance.

Since any cassette deck integrates aspects of electronic and mechanical engineering, it's natural that only when superior heads are teamed with superior transport designs, can we hope to produce a

superior cassette deck. That's why we have combined the 3-head design with the JVC perfected direct-drive mechanism, famed for its incredibly low wow and flutter. And that's why we've incorporated Dolby® C-type noise reduction even in our less expensive models. Accuracy, convenience and fun are represented by such JVC-exclusive features as our B.E.S.T. tuning system, our digital multi-function counter and our spectro-peak indicator. Check out the entire JVC cassette lineup to find the deck with the features that are right for you.



## A Concise Guide to JVC Cassette Deck Technology and Features

### TAPE

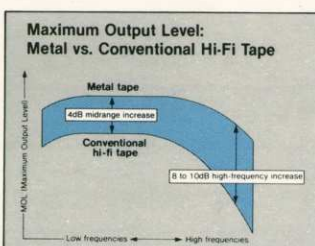
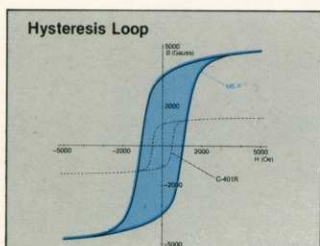
For the past few years, major cassette tape manufacturers have introduced a succession of new and improved tapes. Naturally, you'll want to make full use of the best of these tapes, so we design all JVC cassette decks with the most up-to-date electronics and features to keep pace with the dynamic world of tape technology. We ensure that every deck extracts every potential from every tape you use.

Metal tape — it is the most recent development in tape technology and required a major redesign of deck electronics. Metal tape performance improve-

ments include: more output over a wider range, more high-frequency headroom, less noise and lower distortion.

JVC was the first to perceive the potential of metal tape, and introduced the world's very first metal-capable cassette deck several years back. Today, all JVC cassette decks are specially designed to handle metal tape.

Our commitment to metal tape has grown even deeper: We now manufacture our own professional-quality metal cassette tapes. At last, metal-capable decks have met their match.



### HEADS

A never ending search for better head materials and designs is a JVC tradition. It was no fluke that JVC was able to market a metal-capable cassette deck before anyone else; our SA (Sen-Alloy) heads, which we've been using for years, displayed just the right electromagnetic properties required by metal tape. And, as you will see, we've kept our head and improved the design in many ways.

#### SA (Sen-Alloy) head

The SA (Sen-Alloy) head, an exclusive JVC design for almost a decade, has superb magnetic and electrical properties, such as high

efficiency (low core loss), excellent gap precision, good anti-wear characteristics and superior anti-corrosion characteristics. But most important, it has a high maximum flux density; that is, linearity in the high frequencies is particularly good. And this is exactly what makes our SA heads ideal for metal and other recently introduced high-performance tapes.

#### X-cut SA combination Rec/Play head

This is a configuration in which an SA record head and an X-cut SA play head are placed back to back in a single housing so you can

#### Evaluation Chart

	0	1	2	3	4	5	6	7	8	9	10
Permeability (μ)							17,000			30,000	30,000
Coercivity (Oe)				0.05					0.025		0.015
Max. Flux Density (G)			3,300		4,800						11,000
Curie Temperature (°C)			90			280					500
Hardness (Hv)			200				500				650

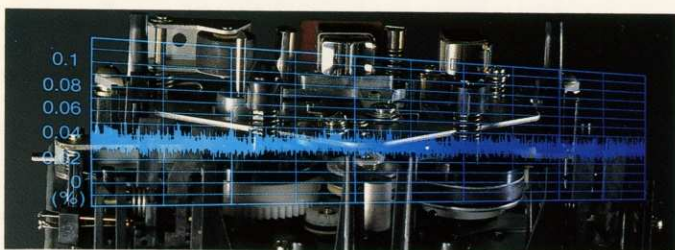
SA (SEN-ALLOY) F FERRITE P HARD PERMALLOY

(\*\*Dolby® and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.)









The slow tape speed and narrow track width of cassette tapes mean good speed accuracy is essential. JVC engineers have gone to great lengths to provide the best possible motor speed accuracy, transport dependability, tape alignment accuracy and every other critical factor in every deck they design. The culmination of all their efforts is the JVC direct-drive transport featuring the cog-free, noise-free Pulse Servo motor.

## JVC direct-drive tape transport

The capstan used in the DD Series of JVC decks is actually an extension of the motor shaft. There are no cams, pulleys, belts or gears to affect speed accuracy. Silent and practically vibration-free, the capstan/motor shaft turns at the same speed as the running tape.

By simplifying the transport, accuracy has improved dramatically, which is particularly important for three-head decks since they are more susceptible to azimuth error, level variations and dropouts. Our newly-designed compact Pulse Servo motor, manufactured in our own plant, takes most of the credit for the high level of performance of all of our direct-drive decks.

## Pulse Servo motor

The Pulse Servo motor used in our DD Series of cassette decks incor-

porates a significant amount of technology originally developed for the motors in our turntables, products JVC takes particular pride in. This high-technology motor design, termed a "4-phase, 8-pole, brushless & coreless FG direct-drive motor," uses no brushes; polarity switching is performed by electronic Hall-effect elements instead. Since there is no mechanical contact, no noise or sparking (which can also cause noise) occurs. This motor is also coreless and slotless; cogging — tiny fits and starts in motor rotation — is avoided completely.

But the greatest feature of the Pulse Servo motor is its FG (Frequency Generator) servo system, a high-precision electronic device that monitors the speed of the motor by analyzing its phase. Any speed error is translated into frequency deviation and compensated for instantly by a responsive servo system. The 204 poles of the FG generate thousands of pulses a second which are totaled to produce a correction signal. Abuse or slight mechanical error (if any) will not affect the servo's accuracy. Changes in temperature won't affect accuracy either, because a new "Multiplied Bridge Drive" (MBD) circuit has been used to compensate for any thermally caused speed deviation. In the DD-99, the Pulse Servo motor is

further controlled by a quartz-referred double-servo circuit which provides ten times more accuracy than do common "single-servo" quartz circuits.

In any motor, mechanical precision plays as important a role as does electronic precision. The flywheel in our Pulse Servo motor is constructed from several dissimilar metals so as to eliminate modulation noise and resonance which, together, can cause wow and flutter and high-frequency noise.

What all of this adds up to is impressive figures. The wow and flutter specs of our direct-drive models — 0.055% or 0.06% (DIN 45 500) — are among the lowest of any consumer cassette decks on the market.

## Tension stabilizing loop

The supply reel is connected to the takeup reel by means of a belt which supplies the proper hold-back tension throughout play or recording. It's an electrical system; no mechanical friction is employed to create tension. Therefore, tension is always uniform, and stability will not deteriorate with the passage of time. Stability is further enhanced since no tension pad is used, a potential cause of poor head-to-tape contact. As a result, modulation noise is dramatically reduced and reproduction quality acquires a new clarity.

## Two-motor full-logic control

Each of our top direct-drive decks also features a full-logic control system for its two-motor tape transport. A JVC-developed IIL (Integrated Injection Logic) IC, representing more than 10,000

bits of memory in a single tiny chip, is utilized. The following conveniences are available:

- Direct change of mode — Changing from one mode of operation to any other is direct; there's no need to go through STOP.
- Light-touch button operation — Just a light touch on any operate button sets the deck into the desired mode.
- Punch-in recording — Entering the Record mode directly from the Play mode is possible, which makes tape editing easy.
- Remote control — Convenient wired remote control is possible via the optional R-50E remote control unit. All basic deck operating controls are repeated.

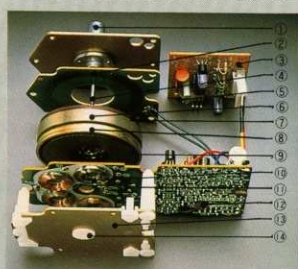
## One-motor full-logic tape control

Several of the new JVC decks have an advanced one-motor full-logic tape control system which makes use of the inertial force of the rotating flywheel to supply the energy for changing operating modes. Buttons control the transport electronically rather than mechanically. The logic — a mechanical switching sequence — is electrical. The result is a reliable tape control system that requires only light fingertip pressure.

## Logic control mechanism for soft touch operation

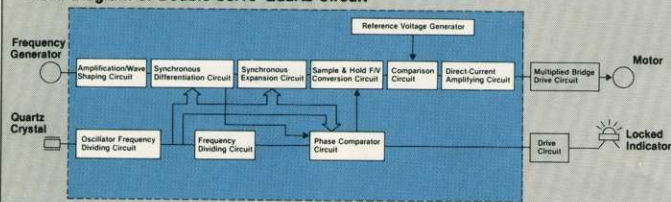
Many of our less expensive models feature the luxury of light-touch operation also. This is made possible by a clever arrangement that taps the inertial energy of the rotating motor in order to supply power for mode changes.

Cross-Section of Quartz-lock Pulse Servo Motor

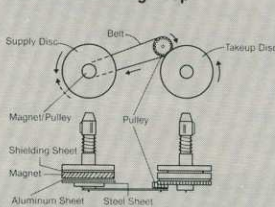


- 1 Bearing
- 2 Frequency Generator Base
- 3 Quartz-Lock Speed Control Circuitry
- 4 Motor Shaft/Capstan
- 5 Quartz-Crystal Oscillator
- 6 Flywheel
- 7 Frequency Generator Magnet
- 8 Rotor Yoke
- 9 Rotor Magnet
- 10 Drive Coils
- 11 Printed Circuit
- 12 Frequency Generator Speed Control Circuitry
- 13 Yoke Plate
- 14 Thrust Bearing

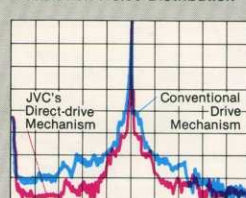
Block Diagram of Double-Servo Quartz Circuit



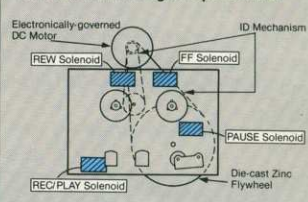
Tension Stabilizing Loop



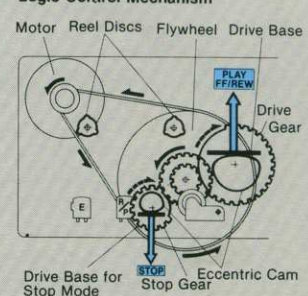
Modulation Noise Distribution



One-Motor Full-Logic Tape Control



Logic Control Mechanism







By "control" we mean the mechanical and electrical devices that make cassette operation easier, more comfortable and more fun. They are the control features that expand the versatility of each JVC deck. Many of them are exclusive, helping you get the most out of each tape during recording or playback.

## B.E.S.T. tuning system

Each of the literally hundreds of cassette tapes on the market has its own specific electromagnetic properties. The JVC computerized B.E.S.T. (Bias, Equalization, Sensitivity of Tape) tuning system, featured in our top model, analyzes the electromagnetic properties of any tape, and adjusts the deck's electronics for a perfect match. At the touch of a button, B.E.S.T. extracts good sound from a mediocre tape and great sound from a good tape. Just imagine what it can do with a great tape!

A tiny one-chip microcomputer — 4-bit 2k ROM configured — evaluates each electromagnetic parameter, finding, first, the optimum bias and equalization levels, and then matching tape sensitivity, all in about 30 seconds. The microcomputer chooses from 16 possible bias values for each type of tape. The same is true for equalization and sensitivity matching. Bias is set with the MOL (Maximum Output Level) of the tape

weighted, so that distortion, dynamic range and frequency response are all optimized. Equalization is adjusted not only at high frequencies (12.5kHz) but at mid frequencies (4kHz) as well. All in all, the B.E.S.T. tuning system produces an ideal balance of bias and equalization which yields flat response combined with low distortion — all with computer accuracy and one-touch convenience.

## Electronic fluorescent tape counter

The 4-digit tape counter on some models meters the tape via electronic means rather than via mechanical belts and cams. It's therefore highly accurate. At the touch of a button, the counter may be switched to the elapsed time mode. In this mode the counter is linked with the tape-motion buttons, measuring time during Rec and Play, but stopping during Pause and Stop. When tape motion resumes, the elapsed time count resumes where it left off.

## Digital multi-function counter

This electronic fluorescent counter offers four useful modes:

- (1) 4-digit display of amount of tape used up.
- (2) Minute and second display of remaining tape time.
- (3) Minute and second display of elapsed tape time.
- (4) Numerical display of the

selection programmed by the Multiple Music Scan system.

Of the four modes the remaining tape time mode deserves special mention. Here's how it's used: First insert a tape, set the COUNTER DISPLAY mode to the appropriate position ("Remaining Time") and choose the appropriate tape length (any of four lengths from C-46 to C-120). Next, begin playing or recording. If the tape is a C-60, for instance, the countdown begins from "30" (30 minutes). When the countdown reaches "6" (six minutes of tape time remaining), the readout changes from minutes only to minutes and seconds ("5:59" meaning 5 minutes, 59 seconds). Even if you stop the tape, change from Record to Play or vice versa, or resume playing, the accuracy of the remaining tape time display is unaffected.

This counter system combines a non-contact hub rotation detector (a sensor and a phototransistor) with a microcomputer. Accuracy is top-notch.

## JVC music scan systems — Multiple and single

The MMS (Multiple Music Scan) system lets you cue in on any selection on a tape, skipping up to 20 selections on the way. Operation is pushbutton simple.

The SMS (Single Music Scan) system lets you easily go back to the beginning of the selection currently playing or being recorded, or jump ahead to the beginning of the next selection. Again, operation is pushbutton simple.

## Counter memory

The DD-99 has a very useful convenience feature. When the tape counter (which also shows the

elapsed time) is used in conjunction with the MEMORY and AUTO REWIND buttons, three unique repeat functions are available: (1) between the beginning of the tape and any memory-reset position ("1234" for instance); (2) between the "0000" indexed position (anywhere on the tape) and any memory-reset position ("1357" for instance); and (3) between "0000" or any memory-reset position and the end of the tape.

## Auto rewind & play

The DD-99 and DD-77 feature Auto Rewind & Play. When the switch is set to AUTO REWIND & STOP, the tape automatically rewinds after the end of play (or record). But if the switch is set to AUTO REWIND & PLAY, the tape automatically begins playback as soon as it is completely rewound, so you can listen to one side of a tape over and over again.

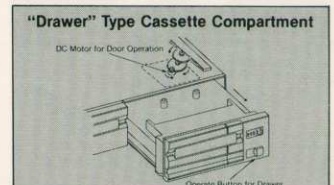
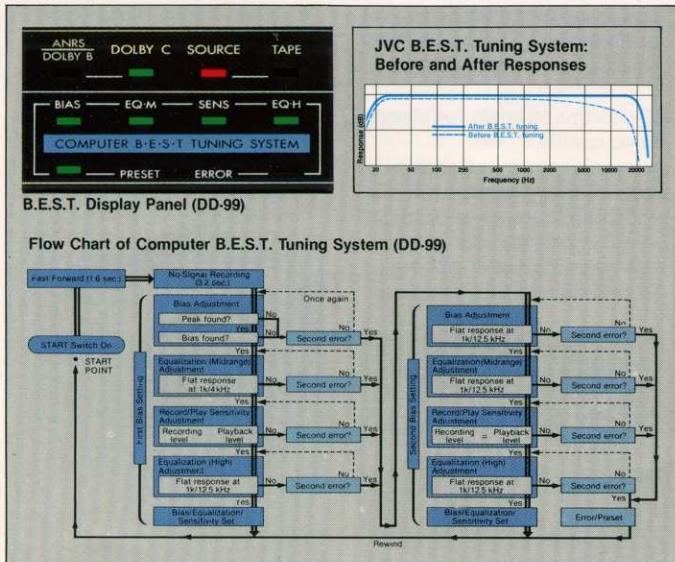
## Rec (ording) mute

Using the Recording Mute and Pause buttons lets you put pauses between any two selections without having to turn the input level control down, or leave the Record mode. You can easily edit out commercials and other unwanted messages as you record.

## Drawer-type tape compartment

JVC has come up with a new kind of tape loading system — "the drawer." Model D-E3 has a drawer that silently opens and closes at the touch of a button, driven by a well-damped motor. Tapes are placed *horizontally*, not vertically, in the drawer. The arrangement is not only simple to use, but gives the D-E3 smooth, sleek lines.

Note: Features listed are not necessarily available on all JVC cassette decks.



Music Scan Buttons (DD-99/77/66)





# DD-99 Open Reel Sound Quality with Cassette Convenience

Direct-Drive Cassette Deck

- Quartz-lock, direct-drive Pulse Servo motor — Controlled by Double Servo and Multiplied Bridge Drive for near-absolute speed constancy
- B.E.S.T. tuning system — Computer-set Bias/Equalization/Sensitivity
- Three-head configuration — X-cut SA combination Rec/Play and two-gap SA erase heads
- Dolby-C/B (ANRS) noise reduction — Reduced noise and greater high-frequency headroom
- Electronic digital tape counter with Memory 1 and 2 — Also doubles as elapsed time counter

Designed to rival the sound quality of open-reel decks, the DD-99 combines such high-technology JVC innovations as a Quartz-lock, direct-drive Pulse Servo Motor with two new twists: a Double Servo and Multiplied Bridge Drive. Add them to a three-head design using

an X-cut SA combination Rec/Play head and the B.E.S.T. tuning system, and you get peerless performance.

## Quartz-lock, direct-drive Pulse Servo Motor improves speed accuracy.

Using a low-rpm direct-drive motor, the highly accurate tape transport of the DD-99 is simplicity itself. This means greater reliability, and better performance from the 3-head configuration. The DD-99's capstan-drive motor is what is called a Pulse Servo type. Its coreless design completely eliminates jerky motion called "cogging," which means extremely low wow and flutter. Speed accuracy is provided by means of a quartz-referred Double-Servo circuit, together with new "Multiplied Bridge Drive."

## Computerized B.E.S.T. tuning system — the matchmaker.

The B.E.S.T. tuning system automatically compensates for any

differences in Bias, Equalization and Sensitivity for flat response (from 40 to 12,500Hz  $\pm 1$ dB) from any tape. It's all done by means of a built-in computer and takes only about 30 seconds.

## Three-head configuration provides maximum performance and monitoring capability.

Three heads — JVC's exclusive X-cut SA combination Rec/Play head (two heads in one housing), and two-gap SA Erase head — provide two very important benefits. One, it allows you to monitor your recordings as they're being made, and two, it means every head is provided with an optimum gap width — no compromises.

## DC-configured amps for clear sound quality.

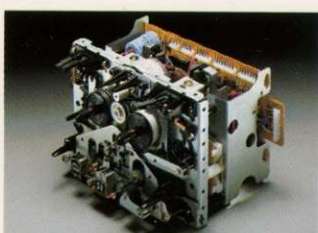
Every amp in the signal path, even those for noise reduction and headphones, are DC configured. Distortion and noise caused by coupling capacitors are all reduced. Clarity, fast transient

response and wide frequency range are all assured.

## Digital tape counter doubles as an elapsed time counter.

In conjunction with the MEMORY and AUTO REWIND buttons, the unique counter of the DD-99 provides three repeat features. The 4-digit tape counter also serves as an elapsed time counter, measuring in minutes and seconds.

- Two-motor full-logic control tape transport.
- Tension stabilizing loop for better tape-to-head contact.
- Two-colour digital fluorescent level meters — Peak/VU switchable with peak hold in "Peak Mode."
- Music Scan, Record mute, Remote control (optional R-50E), Safety-locked timer standby, Gear/oil-damped cassette lid, Output volume control.



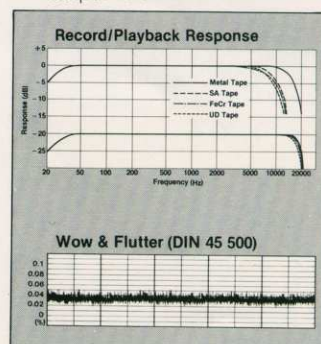
Quartz-Lock Direct-Drive Tape Transport



Computer B.E.S.T. Tuning Display Panel



Tape Counter Mode







# DD-77 Direct-Drive Performance and Versatile, Easy-to-Use Features

Direct-Drive Cassette Deck

- Direct-drive Pulse Servo motor — Temperature compensated by Multiplied Bridge Drive for near-absolute speed constancy
- Three-head configuration featuring SE (Super Excellence) combination Rec/Play head for monitor capability and extended highs
- Digital multi-function counter — Counts tape, shows elapsed/remaining-tape time, shows Music Scan countdown
- Multiple Music Scan system — Up to 20 selections can be skipped
- Dolby-C/B (ANRS) noise reduction system with built-in MPX filter

The DD-77 teams up our proven direct-drive transport featuring a Pulse Servo motor with a grand assortment of convenient features including the 4-mode digital multi-function counter, and 20-selection Music Scan. Add to all of this Dolby-C/B (ANRS) noise reduction

and a three-head configuration, and you've got yourself a winner, the DD-77.

## Direct-drive transport uses Pulse Servo motor for accurate, reliable performance.

The DD-77 is a three-head cassette deck. This high performance configuration demands accuracy from the transport so as to avoid azimuth error and drop-outs. That's why we've developed our direct-drive system utilizing a Pulse Servo motor, and that's why we've eliminated the pressure pad in the DD-77. The motor is immune to cogging, as well as speed fluctuations caused by changes in temperature and humidity. Multiplied Bridge Drive improves accuracy further.

## SE (Super Excellence) combination Rec/Play head with superior high-frequency response.

The search for the perfect tape head has been a long one. JVC's new SE combination Rec/Play

head is a giant step in the right direction. It combines a wide-gap (4 micron) recording head and a narrow-gap (1 micron) playback head in one housing, your assurance that both recording and playback performance will be optimum. A pleasant surprise: the three-head DD-77 lets you monitor recordings as they are being made.

## The digital multi-function counter provides you with a wealth of versatility.

The electronic tape counter of the DD-77 is a 4-digit indicator with four useful operating modes: (1) as a tape counter, (2) as an elapsed time counter, (3) as a remaining time counter, and (4) as a Music Scan indicator. In the elapsed-time and remaining-time modes, indication is in minutes and seconds, very helpful for recordists. Four front-panel switches make it a simple matter to choose tape lengths.

## 20-programme Music Scan lets you jump ahead or back to any selection on the tape.

Zeroing in on your favourite selection is pushbutton easy with the DD-77 thanks to 20-programme Music Scan. Jump forward or back, skipping up to 20 selections on the way. The digital multi-function counter always lets you know where you're going.

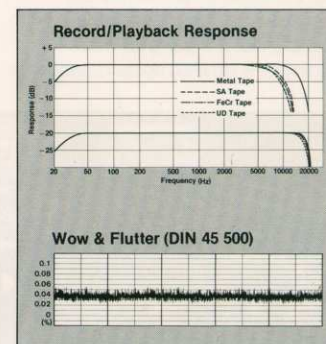
- Two-motor full-logic control tape transport.
- Two-colour digital fluorescent level meters with peak hold.
- Auto rewind and play for automatic repeat between memory-set beginning position and tape end.
- Record mute, Remote control (with optional R-50E), Safety-locked timer standby, Gear/oil-damped cassette lid, Output volume control.



SE Combination Rec/Play Head



Four Multi-Function Counter Modes



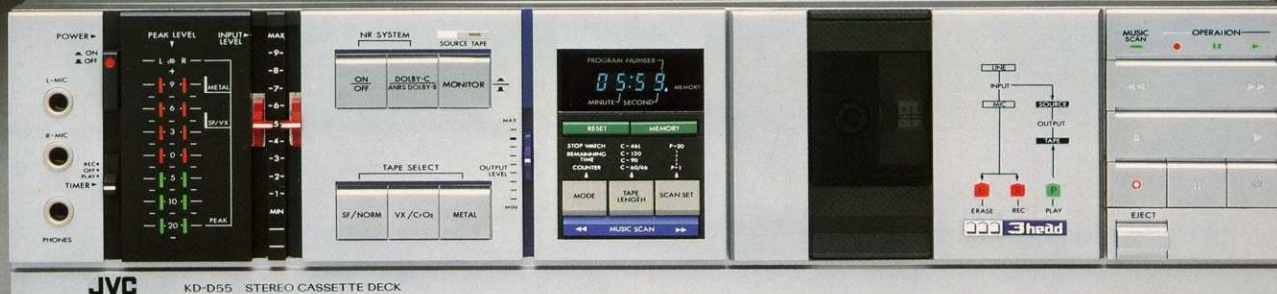




### Direct-Drive Cassette Deck

- 8





# KD-D55 Uncompromised Design for Uncommon Performance

Metal Cassette Deck

- Full-logic control tape transport for effortless operation
- Digital multi-function counter — Counts tape, shows elapsed/remaining-tape time, shows Music Scan countdown
- Multiple Music Scan system — Up to 20 selections can be skipped
- Three-head configuration for better high-frequency response
- Dolby-C/B (ANRS) noise reduction system

Here's a refined cassette deck providing a wide range of sophisticated features for convenience and performance. Tape operation is smooth and trouble-free thanks to full-logic operation and soft-touch controls. At the touch of a button, the digital readout provides you with metered tape length, elapsed time, remaining recording/playback time, and selections chosen by Music Scan. For extended high-frequency response, we've given the KD-D55 a three-head design so each head has the

optimum gap width. You won't find another deck as delightful, as carefree or as fun as the KD-D55.

## Full-Logic control mechanism for soft-touch operation.

For convenient soft-touch operation and direct mode change, the tape transport of the KD-D55 uses a JVC-exclusive full-logic control mechanism. Its quiet operation will amaze you.

## Electronic digital multi-function counter: A versatile and useful indicator.

Can I squeeze one more song onto my tape? The remaining tape mode of the electronic digital multi-function counter of the KD-D55 can tell you this down to the second, and, at the push of a button, it can tell you three more kinds of information: (1) tape count to 4 digits, (2) elapsed time with a time accumulating function, and (3) what song selected by the JVC Multiple Music Scan system is in play.

## JVC Multiple Music Scan: Skip up to 20 selections to cue in on the one of your choice.

Finding any song on the tape — up to 20 selections away in either direction — is as simple as pushing a button. JVC's Multiple Music Scan system makes this possible by detecting and keeping track of interselection blanks. It's so convenient you'll wonder why no one ever thought of it before.

## Three-head configuration for better high-frequency response.

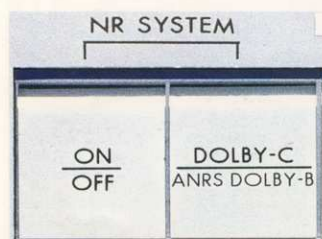
For optimum performance from each and every tape, JVC has provided the KD-D55 with three heads — one each for record, play and erase. Since the Metaperm record and play heads are separate, off-the-tape monitor is possible with response reaching the highest audible limit. Also noise and distortion are

significantly reduced thanks to this discrete head design.

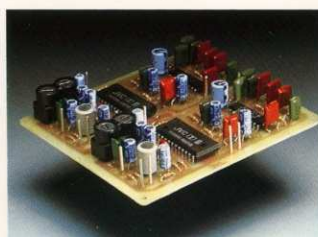
## Dolby-C/B (ANRS) noise reduction system means a new level of silence.

Silence is absolute. You hear no objectionable hiss during quiet passages or even during breaks between songs. The reason is the new Dolby-C noise reduction system that provides up to 20dB of noise reduction at the high frequencies where noise is most evident to our ears. During use, you won't notice when the circuit is in, for it does not alter the nature of the music in any way.

- 7-LED multi-peak indicator — one per channel.
- Record mute.
- Output volume control.



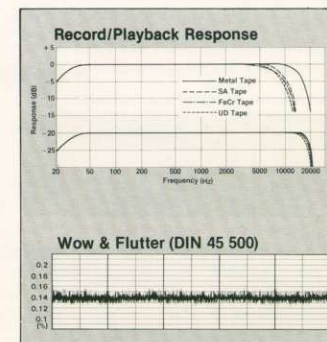
NR Switches



Dolby-C NR Circuit



Control Panel for Multi-Function Counter







# KD-D50 A Fine Balance of Performance and Convenience

Metal Cassette Deck

- Two-colour fluorescent SPI — Spectro-Peak Indicator
- Digital multi-function counter — Counts tape, indicates elapsed/remaining-tape time, shows Music Scan countdown
- Multiple Music Scan system — Up to 20 selections can be skipped
- Dolby-C/B (ANRS) noise reduction
- Logic control mechanism for soft-touch operation, SA head, more

Convenience is king with the KD-D50. JVC has given it Multiple Music Scan so you can easily zero in on any taped selection with ease, skipping up to 20 selections along the way. The digital multi-function counter displays not only the status of Music Scan but also elapsed time and remaining time in minutes and seconds. It also operates like a standard tape counter. Other extraordinary features of the KD-D50 include the two-colour fluorescent SPI, Dolby-

## Fluorescent Spectro-Peak Indicator



Response when input signal is bass rich.



Response when input signal is treble rich.

C/B (ANRS) noise reduction and a logic control mechanism which provides soft-touch operation.

## Two-colour fluorescent SPI provides all the information you need for perfect recordings.

Most cassette decks provide you with just two meters, one for each channel. The KD-D50 gives you more: it has eight meters in one easy-to-read display. Five are peak-reading spectral displays that break up the audible frequency band into five zones. Two are channel-by-channel VU reading meters and one is a composite peak-reading meter. You'll find the JVC SPI to be the finest aid available for creating top-notch recordings.

## Multiple Music Scan lets you pinpoint any taped selection in moments.

Suppose you want to locate one particular song that happens to be right in the middle of the tape. Multiple Music Scan makes it

## Four Multi-Function Counter Modes



Tape counter mode Remaining tape mode



Elapsed-time mode Scan mode

simple: If the song you want to hear is the fifth song, just touch the Music Scan button five times. The multi-function counter will show this number. Then touch Fast Forward. The deck speeds the tape right to the fifth song and begins play. With Multiple Music Scan, you can skip up to 20 songs in either direction.

## Digital multi-function counter: Provides four operating modes.

Besides the Music Scan mode, the digital multi-function counter gives you the following modes of operation: (1) tape counter mode, (2) elapsed time mode, and (3) remaining time mode. When you make a recording, the real-time modes can be indispensable.

## Dolby-C/B (ANRS) noise reduction: Tape hiss is a thing of the past.

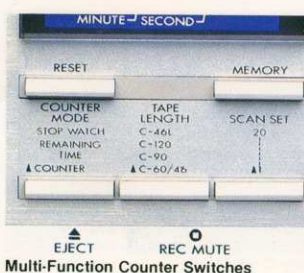
Dolby-B noise reduction (and the essentially similar ANRS system) has been an effective workhorse for about a decade. Now a new

noise reduction system has been introduced that can reduce noise (hiss) by up to 20dB between 1kHz and 10kHz, and, at the same time, improve the dynamic headroom. This new system is Dolby-C NR, and it's now available along with Dolby-B NR (ANRS) in the new KD-D50.

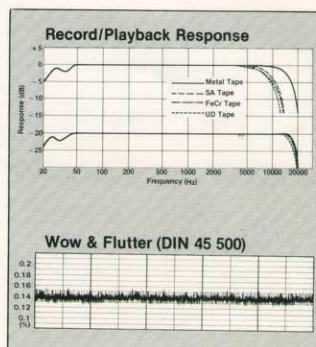
## The SA (Sen-Alloy) head — an exclusive JVC design.

The KD-D50 uses our exclusive SA Rec/Play head known for its high maximum flux density. Offering exceptionally good linearity in the high-frequencies, the SA head is ideal for metal and other high-performance tapes.

- Logic control mechanism for soft-touch operation.
- Memory counter.



Multi-Function Counter Switches







# KD-D40 Special Features for Perfect, Noise-Free Recordings

Metal Cassette Deck

- Two-colour fluorescent SPI — Spectro-peak indicator
- Dolby-C/B (ANRS) noise reduction system
- JVC SA (Sen-Alloy) Rec/Play head — Ready for metal tape recording
- Logic control mechanism — For soft-touch operation
- Single Music Scan system — For utmost convenience

The KD-D40 is special in several ways. First, it includes the two-colour fluorescent SPI (Spectro-Peak Indicator) that lets you make the most of the limited headroom of cassette tapes. Second, it has Dolby-C/B (ANRS) noise reduction so you have more headroom to work with. And third, it has several convenience features to make operating the KD-D40 a sheer joy, like Single Music Scan that lets you find any song — instantly. It also has a logic control mechanism. As you can see, the KD-D40 will satisfy everyone, even finicky audiophiles.

## Two-colour fluorescent SPI: The ideal recording aid for low-noise, wide-range results.

Cassette tapes are notorious for having poor high frequency headroom. The fluorescent SPI indicator of the KD-D40 lets you analyze the frequency makeup of your music so you can easily avoid saturating the high frequencies, while, at the same time, recording at the highest possible level so as to avoid hiss. Beside the five-band spectro-peak indicator section are three more useful indicators — two VU-reading indicators (one for each channel) and a peak-reading indicator for the composite signal.

## Dolby-C/B (ANRS) noise reduction means a new degree of quietness.

Dolby-C NR is the newest noise reduction system from Dolby Laboratories. It provides about twice as much noise reduction at high frequencies (where hiss noise is prevalent) as Dolby-B NR and the ANRS system. Tapes recorded in

Dolby-C NR take on a new quietness you've got to hear to believe.

## The SA (Sen-Alloy) head — an exclusive JVC design.

The KD-D40 uses our exclusive SA Rec/Play head known for its high maximum flux density. Offering exceptionally good linearity in the high-frequencies, the SA head is ideal for metal and other high-performance tapes.

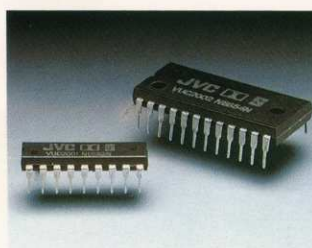
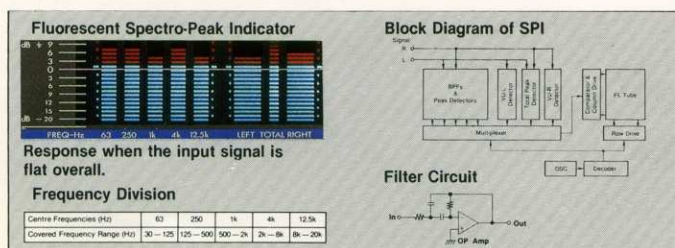
## Logic control mechanism gives you smooth, soft-touch operation.

No mechanical levers; no noisy solenoids. The KD-D40 uses a new type of mechanism that gives you the luxury of soft-touch operation with the economy of a one-motor design. This mechanism derives its power for mode changing from the flywheel.

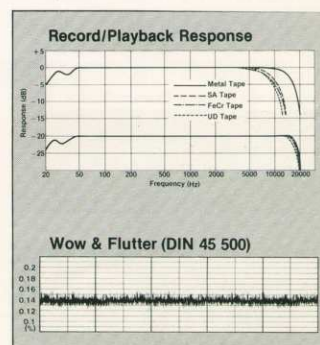
## Single Music Scan lets you find your music with pushbutton ease.

Have you ever wanted the ability to skip a song and start playing the next one, or go back and hear the same song over again? It's easy with Single Music Scan. This convenient feature searches for the "blanks" between recorded songs, so there's never a mistake.

- Cue and Review.
- Record mute.



Dolby-C NR ICs





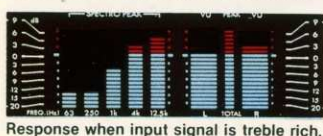
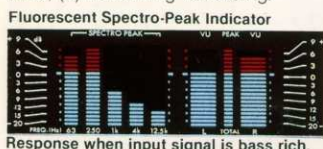


## KD-D4 True Convenience Is in the Limelight

Metal Cassette Deck

- Two-colour fluorescent SPI — Spectro-peak indicator
- Digital multi-function counter — Counts tape, shows elapsed/remaining-tape time, shows Music Scan countdown
- Multiple Music Scan system — Up to 20 selections can be skipped
- Logic control mechanism for soft-touch operation
- Super ANRS and ANRS/Dolby-B noise reduction, Rec mute, more

JVC engineers have come up with a truly innovative, easy-to-use cassette deck having an arsenal of sophisticated devices for convenience and fun. Tape operation is smooth and trouble-free thanks to soft-touch controls. Peak levels are shown at five frequencies for easy spectrum analysis on a fluorescent display. A digital readout provides (1) metered tape length, (2) elapsed time, (3) remaining recording/



playback time, and (4) selections chosen by Music Scan. A twist of a knob lets you choose whatever readout you desire. No deck is more delightful, more carefree or more fun than the KD-D4.

### Two-colour fluorescent SPI: A most useful multi-peak indicator.

A spectro-peak indicator is the most useful, most accurate way to set optimum recording levels. It features five bars that display peak levels at five frequencies. In addition, there are two VU-reading bars (one for each channel) as well as one peak-reading bar for the composite output. It's one of the most comprehensive and useful level indicating systems ever conceived.

### Electronic digital multi-function counter: A versatile and useful indicator.

The digital counter of the KD-D4 offers multiple functions, all useful and sure to add to your recording Multi-Function Counter and Its Mode Switch



1 Tape counter mode  
2 Elapsed-time mode



3 Remaining tape mode  
4 Scan mode

and playback delight. In addition to functioning as a precision 4-digit electronic tape counter, it serves, at the twist of a knob, as (a) an elapsed-time counter with a time accumulating function, (b) a counter that displays remaining tape in minutes and seconds, and (c) an indicator for the JVC Multiple Music Scan system described below.

### JVC Multiple Music Scan: Skip up to 20 selections to cue in on the one of your choice.

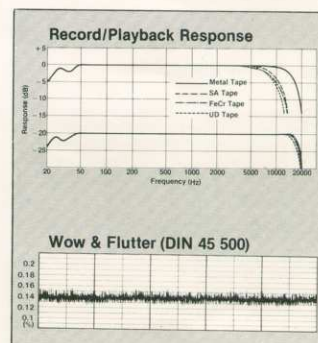
JVC's Multiple Music Scan system has made selecting a particular song on a tape as simple an operation as on a record. And you can skip up to 20 selections along the way. Once you get used to it, you'll wonder how you ever got by without this feature before.

### Logic control mechanism for soft-touch operation.

The tape transport employs a JVC-exclusive logic control mechanism. By tapping the inertia of the drive

motor with an ingenious cam and gear arrangement, we've provided convenient soft-touch operation in all modes.

- Memory stop/play, used in conjunction with the tape counter, lets you stop the tape at any desired point, automatically.
- Super ANRS and ANRS/Dolby-B noise reduction.
- Cue & review functions.
- Timer standby can be initiated by simply pushing the Record button.
- Metaperm Rec/Play head and 2-gap ferrite Erase head are fully metal-tape capable.







## KD-D35 Features and Sound Quality Worth Showing Off

Metal Cassette Deck

- **Logic control mechanism — Soft-touch operation**
- **7-LED multi-peak indicator system (one per channel) — Electronic metering accuracy**
- **Single Music Scan — A handy extra**
- **JVC Metaperm Rec/Play head — Ready for metal tape recording**
- **Super ANRS and ANRS/Dolby-B noise reduction, Rec mute, more**

In many ways the KD-D35 is equipped to handle just about any taping situation. It's fitted with JVC's Metaperm Rec/Play head for full fidelity when utilizing metal tapes. The 7-LED multi-peak indicators assure optimum recording levels. And for convenience, the KD-D35 is not lacking: JVC's velvety-smooth logic control mechanism gives the deck luxurious soft-touch control. The Single Music Scan system lets you zero in on the next selection ahead, or return to the exact

beginning of the one you're listening to. For the money, you can't beat the performance and convenience offered by the KD-D35.

**Logic control mechanism for soft-touch operation.** Most single-motor cassette decks have piano-key type transport controls, requiring firm pressure so that they engage properly. Not the KD-D35. JVC engineers have come up with a transport design that uses the rotational inertia of the motor/flywheel and a series of precision cams to operate all transport controls. Response is positive and only a light touch is required.

**7-LED multi-peak indicator — one per channel.** JVC first introduced their 5-LED multi-peak indicator several years ago to complement the standard VU meters. But the usefulness of the system was so widely recognized that now we've

dispensed with mechanical VU meters altogether in many of our decks and expanded the range of our LED meters to seven, more than adequate resolution for accurately reading peak levels in programme material. Perfect recording levels are a cinch to set with the KD-D35.

### Single Music Scan: An extra bonus.

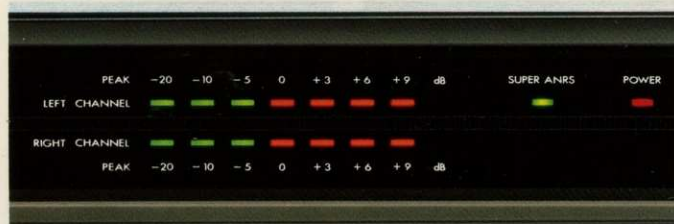
JVC's Single Music Scan system is an extra that should be standard on all decks. Once you use it, you'll see why. Quickly locating a particular selection on a tape — the beginning of the one you're now listening to or the beginning of the next one — is a snap; all it takes is a touch of a button or two.

### Metaperm Rec/Play head is ready for metal tapes.

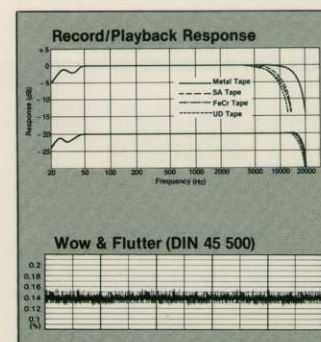
The introduction of metal tapes

required a great change in existing head designs because of the far higher current requirements. JVC's Metaperm Rec/Play head is fully capable of fine performance, whatever the tape type you use. Erase heads also required radical redesigning. Our 2-gap ferrite head is designed to give all tapes, even metal, a double dose of erasure, your assurance that tapes will sound quiet.

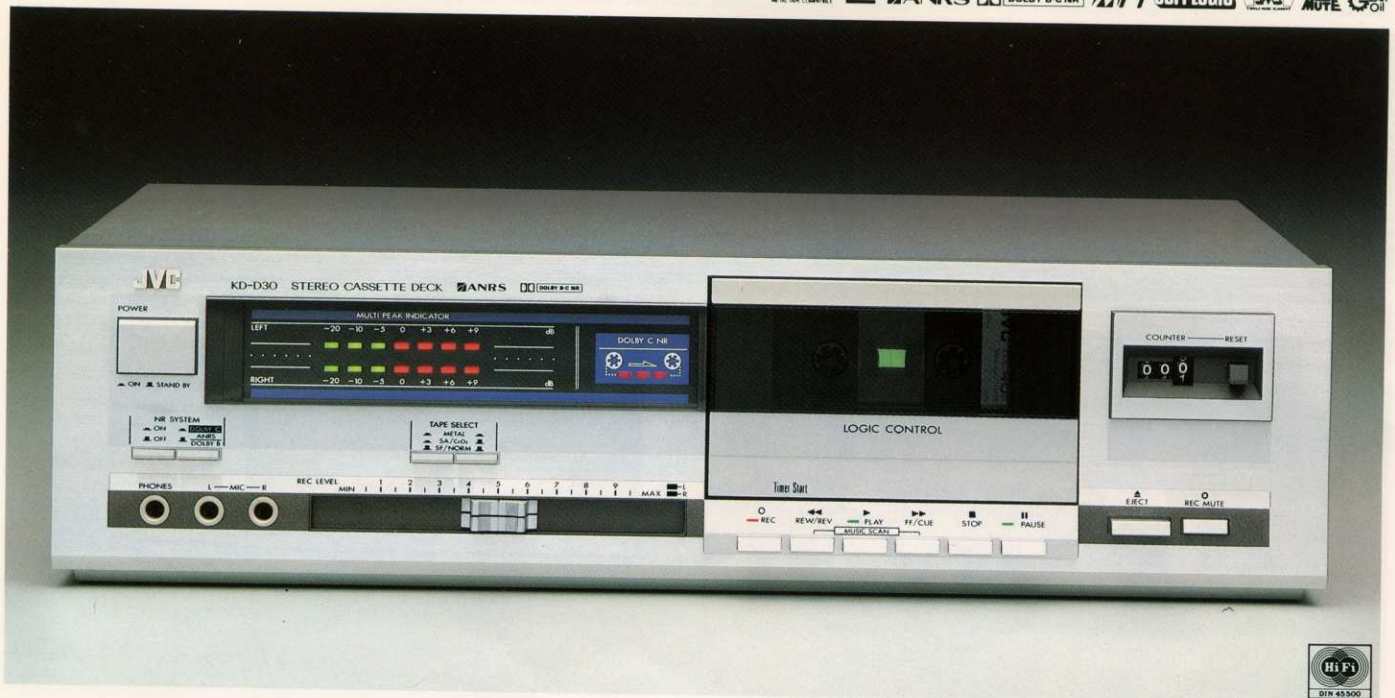
- Super ANRS and ANRS/Dolby-B noise reduction.
- Recording mute to add spaces between selections when recording.
- Timer standby for unattended recording or play when used with an external audio timer.
- Rewind and auto play.



7-LED Multi-Peak Indicator







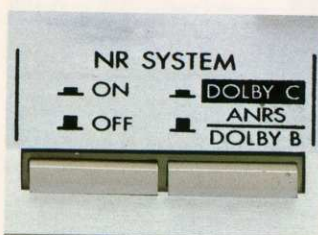
# KD-D30 Low-Noise Performance Thanks to Dolby-C Noise Reduction

Metal Cassette Deck

- Dolby-C/B (ANRS) noise reduction system
- Logic control mechanism — Soft-touch operation
- Single Music Scan system — An indispensable convenience
- JVC Metaperm Rec/Play head — Ready for metal tape recording
- 7-LED multi-peak indicators — One set per channel
- Tape running indicator

The KD-D30 features the sophistication of advanced Dolby-C noise reduction as well as standard Dolby-B (ANRS) noise reduction. What this means to you is that no more tapes will be ruined or spoiled by tape hiss. Some of the other features of the KD-D30 include a one-motor logic control mechanism for comfortable soft-touch operation, Single Music Scan, and responsive LED indicators.

**Dolby-C/B (ANRS) noise reduction decreases noise and**

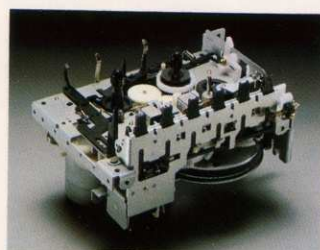


Noise Reduction Buttons

**increases dynamic headroom.** For years, Dolby-B NR, and the essentially similar ANRS noise reduction system, did an admirable job of suppressing tape "hiss." But great strides have been made in the design of tapes, tape heads and electronics in the last few years. New Dolby-C noise reduction is fully compatible with all the new advances, capable of improving the signal-to-noise ratio by 20dB at frequencies between 1kHz and 10kHz, where "hiss" noise is most prevalent. At the same time, dynamic range is expanded significantly, allowing you to make the most of the newest high-performance tapes on the market.

**Logic control mechanism: Luxury without the cost.**

The mechanism of the KD-D30 features soft-touch operation. It doesn't rely on noisy solenoids, though; it receives all the power it needs from the drive motor. This accounts for its quiet, reliable operation. It's logic controlled, too.



Logic Control Mechanism

This means all your tapes are protected against damage that may occur if mode changes are too quick.

**Single Music Scan system lets you jump from song to song with ease and accuracy.**

Let's face it; locating a particular song on a cassette tape will never be as easy or as quick as on a phonograph record. JVC's Single Music Scan system, though, is certainly a giant step forward. Just push the Music Scan button and the Fast Forward (or Rewind) button. Automatically, the deck shuttles the tape forward (or back) to the beginning of the next (or same) song. It couldn't be simpler.

**JVC Metaperm Rec/Play head for your metal tape.**

The high-precision head of the KD-D30 shows high magnetic flux density and high linearity needed for playing quality metal tapes. Improved low-frequency is assured thanks to its highly polished,

hyperbolically curved surface.

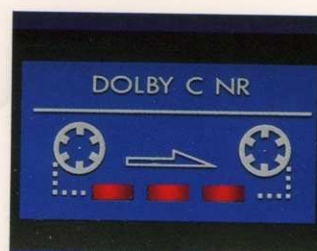
**7-LED multi-peak indicators let you record with confidence.**

The 7-LED indicators provided for each channel respond to peak levels with electronic accuracy so you can confidently record without fear of tape saturation.

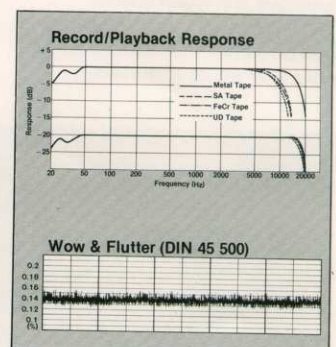
**Tape running indicator.**

A handy LED indicator shows the direction and speed (play, fast forward or reverse) of the tape. It's not only useful, it also gives the KD-D30 a distinctive look.

- Cue and review.
- Record mute for professional editing.



Tape Running Indicator







# KD-D20 Soft-Touch Operation Makes the Difference

Metal Cassette Deck

- Logic control mechanism — Soft-touch operation
- JVC Metaperm Rec/Play head — Ready for metal tape recording
- 7-LED multi-peak indicator for each channel — Electronic metering accuracy
- ANRS/Dolby-B noise reduction — a 10dB improvement in signal-to-noise ratio
- Convenient Cue and review facility

Technology doesn't always translate into a higher price in the world of stereo. The KD-D20 is a fine example of what we mean. It features the luxury of soft-touch operation, a feature once found only in top-of-the-line machines and also 7-LED multi-peak level indicators for each channel. This means more precise operation and easier operation. Last, but far from least, the KD-D20 uses an advanced Metaperm Rec/Play head for full performance from metal tape, the tape of the audiophile.

## Logic control mechanism: An advanced feature in an advanced deck.

If you've ever operated (or owned) a deck with piano-key controls, you'll be able to better appreciate the technology of the KD-D20 that provides soft-touch operation thanks to the logic control mechanism. This clever transport taps power from the drive motor to raise and lower the heads and pinch roller, change drive trains, etc. It's reliable, foolproof, and quiet. Our advanced transport system protects the tapes and mechanism from damage caused by operating abuse — for instance, quickly changing modes from Rewind to Play.

## JVC Metaperm Rec/Play head gives you full performance from the best tapes — metal.

The high-precision head of the KD-D20 exhibits high magnetic flux density and high linearity, properties required for playing quality metal tapes. Its highly

polished surface is hyperbolically curved for improved low-frequency response and to avoid a buildup of foreign matter.

## LED multi-peak indicators: Accurate and fast-acting.

Our multi-peak indicator system — one 7-LED set per channel — follows dynamic undulations of music with lightning-fast response, greatly simplifying the setting of proper recording levels. The LEDs are calibrated to flash at levels more than adequately spaced for accuracy.

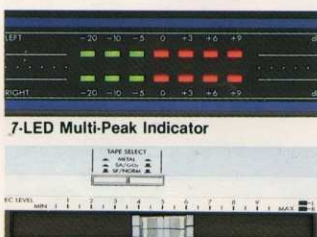
## ANRS/Dolby-B noise reduction takes the "hiss" out of your tapes.

Tape "hiss" has always been a problem with cassette tapes due to a slow play/record speed and narrow track width. The built-in ANRS noise reduction system, which is fully compatible with Dolby-B NR, successfully suppresses hiss without affecting the quality of the recording.

## Cue & review — a convenience feature.

Here's a feature that makes playback and recording a lot easier and a lot more fun. Cue and review lets you easily locate desired selections during play. All you do is operate the FF and Rewind buttons. After the buttons are released, playback resumes automatically.

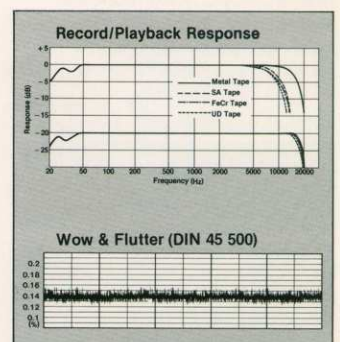
- Slide-type recording level controls for smooth operation.
- Gear/oil-damped cassette lid.



Slide-Type Recording Level Controls



Soft-Touch Operated Buttons







# KD-D10 A Basic Statement in Cassette Technology

Metal Cassette Deck

- JVC Metaperm Rec/Play head — Ready for metal tape recording
- ANRS/Dolby-B noise reduction — a 10dB improvement in signal-to-noise ratio
- Extra-large, illuminated VU meters for low distortion recording
- High value — Solid features for excellent sound quality

If you're looking for a basic cassette deck that will provide years of excellent performance and can make do without a plethora of costly automatic features that add nothing to sound quality, then the KD-D10 is for you. It has all the features you need for producing and reproducing beautiful music: wide-range VU meters, tape select switches (so you can utilize just about any tape on the market including new metal tapes), and an ANRS/Dolby-B noise reduction system. The convenient slide-type level controls let you adjust levels for each channel individually.

## Metaperm Rec/Play head gives you a wide latitude of tapes to choose from.

The Rec/Play head of the KD-D10 is constructed from hard perm-alloy, an alloy that is as hard as ferrite (for long life), and as hi-fi as permalloy (for extended, low-noise response). The surface of the head has been specially contoured to prevent an unnatural rise in mid-bass response known as the contour effect. The high linearity of this head makes it a perfect match for metal tape, the tape of audiophiles.

## ANRS/Dolby-B noise reduction: For hiss-free recordings.

Hiss, unwanted high-frequency noise, is the bane of cassette recordists. The KD-D10 is equipped with the best known system around for fighting this inevitable problem. At hiss frequencies — above 5kHz — the built-in ANRS/Dolby-B noise reduction system can reduce noise up to 10dB. You'll discover

a new cleanness when you use this important feature.

## Illuminated VU meters make setting proper recording levels a snap.

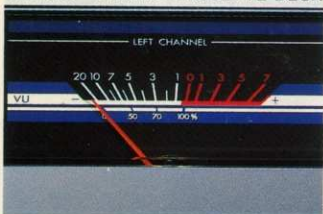
The optimum recording level is a delicate balance between background noise and distortion. A high recording level decreases background noise but brings on the problem of distortion and tape saturation, a phenomenon resulting from trying to record more than the tape is capable of. A low recording level eliminates the problem of tape saturation but background noise becomes a problem. That's why it's important to have accurate — and large — meters like the illuminated VU meters of the KD-D10. They make finding the correct recording level an easy operation.

**Gear/oil-damped cassette lid provides smooth eject action.** Instead of a spring-loaded lid for the cassette compartment, the

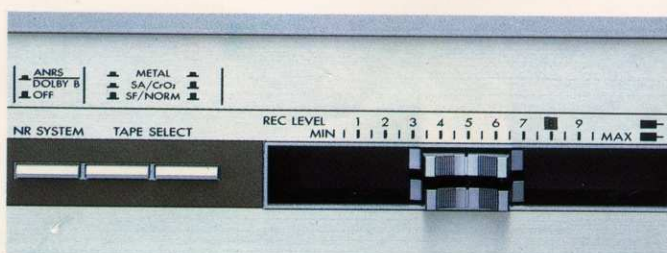
KD-D10 uses a sophisticated arrangement with a toothed rack, oil-damped gear/disc and a spring-loaded brake shoe, which allows the lid to slide forward and then open smoothly and silently. This design is for more than just convenience; it means greater reliability, and less chance that the cassette mechanism will get out of alignment.

- Tape select switches for Metal, CrO<sub>2</sub> and Normal tapes.
- Automatic input selector.
- Tape counter.

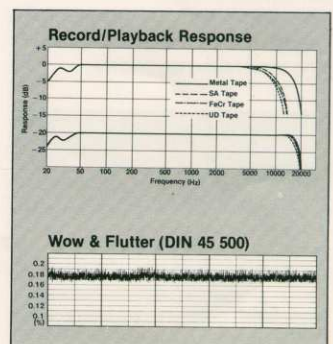
KD-D10 STEREO CASSETTE DECK



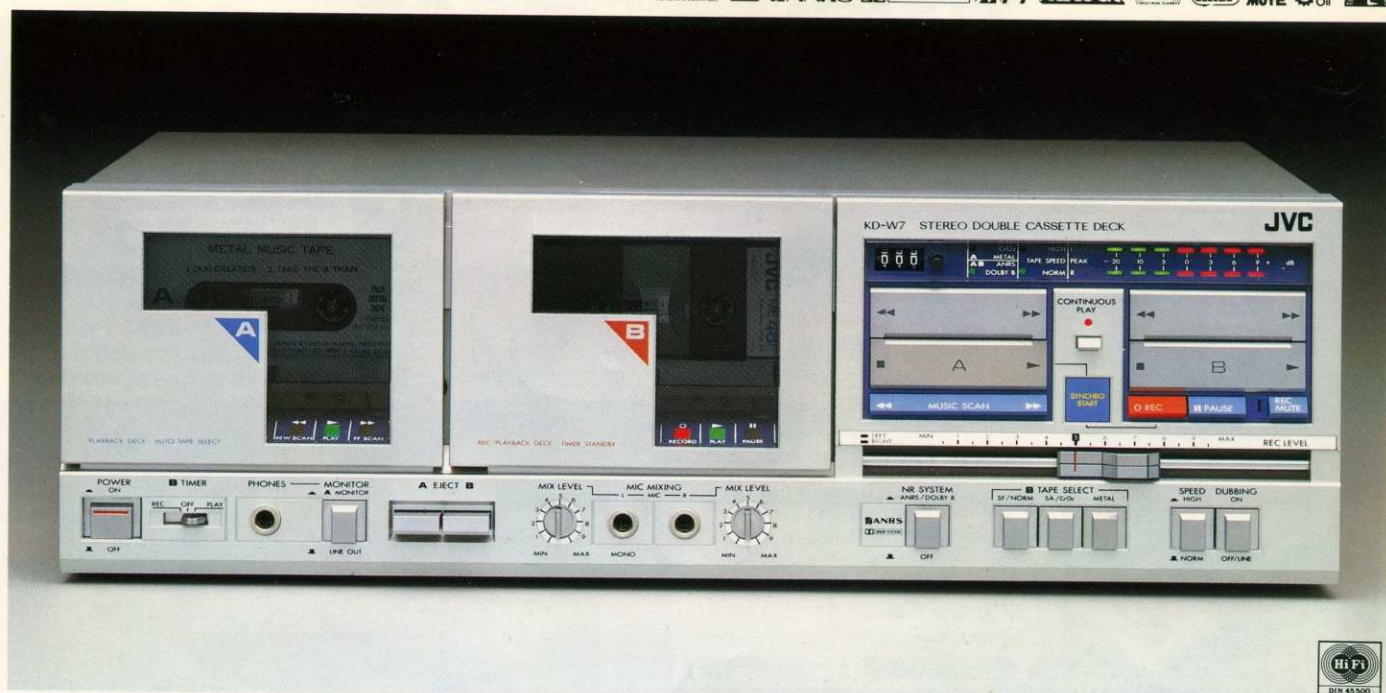
Illuminated VU Meter



Slide-Type Recording Level Controls, and Noise Reduction and Tape Selector Switches







# KD-W7 A Double Decker with Dubbing, Mixing, Continuous Play & More

Double-Transport Cassette Deck

- Two tape transport mechanisms for dubbing at normal or double speed
- "Synchro Start" for simplified dubbing
- Full-logic tape controls for touch operation
- Continuous play, tape/mike and line/mike mixing
- Single Music Scan system — An indispensable convenience
- SA Rec/Play head — Ready for metal tape recording

The KD-W7 is a one-of-a-kind cassette deck: it has two electronically-linked tape transports. When both transports are used simultaneously, a whole new world of taping versatility is open to you. You can dub at normal or double speed; automatically play back two tapes, one right after the other, continuously; and even make sound-on-sound recordings. This is one deck you have to experience firsthand to learn all its capabilities. Visit your JVC dealer right away.

## Two tape transports in a single package.

The KD-W7 has two tape transports. Deck "A" is exclusively for playback. Its JVC Music Scan feature lets you automatically go back and replay whatever song you're presently listening to, or jump ahead to the next selection. The second deck, "B," is for both recording and playback, and is equipped to record the newest tape formulation, metal, just like our best decks.

## Dubbing at normal or double speed: total convenience.

Dubbing (copying) tapes is simplicity itself. The record level controls have clicked "Master Level" positions which ensure that recordings are made at the optimum "dub" level. Pushing the "Synchro Start" button simultaneously sets the "A" deck into the playback mode, and the "B" deck into the recording mode. By using Music Scan on deck "A" together with Rec Mute on deck

"B," you can edit as you dub. It couldn't be any easier.

The KD-W7 also provides two dubbing speeds: normal and double. At double speed, dubbing is accomplished twice as quickly.

## Continuous play between two decks.

Push the "Continuous Play" button and then push PLAY for either deck "A" or "B." The KD-W7 plays the tape on the deck you selected and then, at the end of the tape, switches to the other deck and plays its tape. Both decks feature Auto Rewind & Play, a feature that shuttles the tape back to its beginning after play so there's no interruption in your music.

## Versatile mixing capabilities: S.O.S. is a cinch.

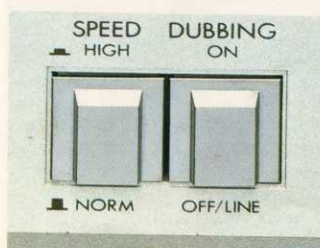
On the KD-W7 you can mix microphone sound with tape

sound, so that you can accomplish Sound-on-Sound (S.O.S.) recording the easy way. The mix level controls facilitate balancing the level of tape sound against microphone sound. You can even assign specific sounds to the left, right or center for an ultimate "mix."

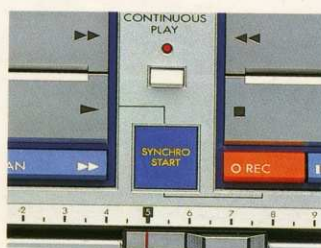
## SA (Sen-Alloy) head for metal tapes.

Of the two tape transports, one features a JVC-exclusive SA (Sen-Alloy) head. While designed to meet the exacting and demanding requirements of metal tape, it's just as effective for standard oxide tapes, as well.

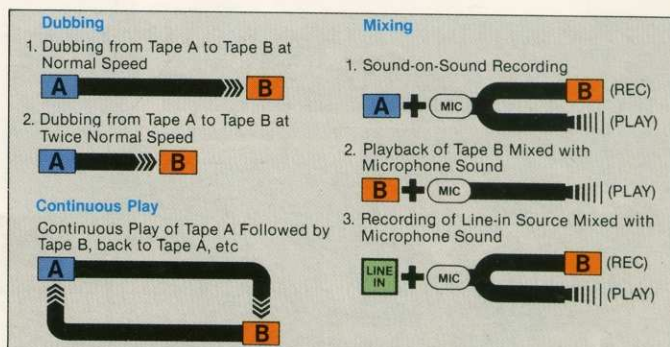
- 7-LED multi-peak indicator — one per channel.
- Record mute.
- Timer standby.



Normal/High Dubbing Speed Selector



"Continuous Play" Button





# D-E5

Mini Metal Cassette Deck

## A Veritable Giant in Terms of Performance

Despite its miniature size, the D-E5 isn't lacking in either features or first-class specifications. Operation is touch button simple thanks to the full-logic control transport. With JVC's Single Music Scan, finding a desired selection on tape is as easy as locating a track on an LP. Super ANRS/Dolby-B (ANRS) noise reduction, 7-LED multi-peak indicators, timer recording, Rec mute, more.



# D-E3

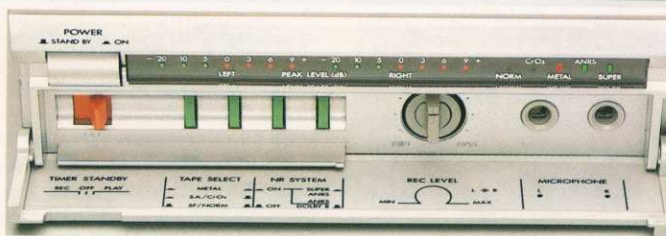
Compact Cassette Deck

## Slim Design with Clever Cassette Drawer

The D-E3 is slim and compact. Actually its height — only 59mm — is no greater than that of a cassette tape. How did we do it? By a clever, motor-driven "drawer" type cassette compartment that silently glides in and out, and plays cassettes horizontally. Yet, like other JVC decks, this model abounds in convenience features like Music Scan to locate selections the easy way at the touch of a button, touch-operated full-logic tape control, two-colour 7-LED multi-peak indicators, and more.



Motor-Driven "Drawer" Type Tape Compartment



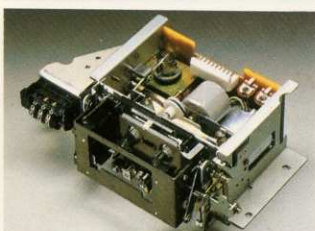
Less Frequently Used Switches and Controls inside the Flip-down Panel

# D-M3

Microcassette Deck

## Full Hi-Fi Sound from a New Tape Format

Utilizing tiny microcassette tapes, the miniature D-M3 deck offers all the basic JVC features for full hi-fi reproduction quality — a two-motor full-logic control tape transport, ANRS/Dolby-B noise reduction, a metal-tape compatible Metaperm head, 7-LED multi-peak indicators, Music Scan and Record mute. When you select the slow 1.2cm/second speed, you can accommodate a long interview or lecture. At the high 2.4cm/ second speed, sound quality is truly hi-fi.



Two-Motor Full-Logic Tape Transport



Less Frequently Used Switches and Controls inside the Flip-down Panel



Super ANRS DOLBY B-C NR



## NR-50

### Super ANRS/Dolby-C-B Noise Reduction Unit

The NR-50 is a versatile add-on unit that features three of the most popular and effective noise reduction systems around — Super ANRS, ANRS/Dolby-B NR and Dolby-C NR. In all three operating modes, breathing and noise modulation are utterly inaudible.



## MI-5000

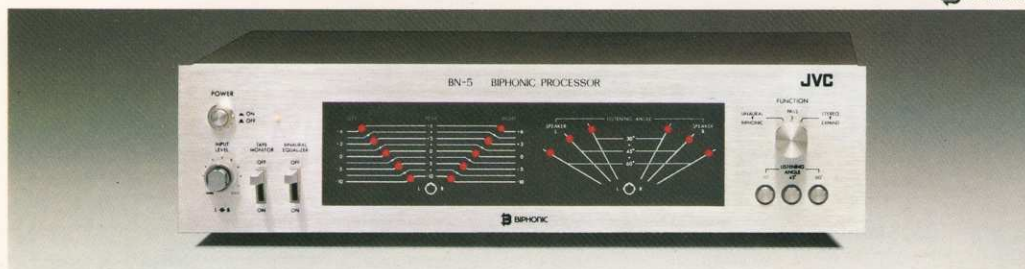
### 6-In/2-Out Mixing Console

The MI-5000 is a versatile 6-in/2-out mixing console for live recording, PA, sound effect creation and tape-to-tape dubbing. Each of the channels may be assigned as follows: phono (Inputs 1 and 2), line (Inputs 1 through 6) or microphone (Inputs 1 through 6). Each channel, in turn, is equipped with a level control, an LED overload indicator, a pan pot and a switch with positions for microphone/ phono/line or microphone/line-1/line-2. Built-in reverb amp, master level control, recording and monitor outputs, more.



## R-50E

### Remote Control Unit for DD-99, DD-77, DD-66



BIPHONIC

## BN-5

### Biphonic Processor

"Biphonics" is the term JVC coined to describe the 3-D effect — a truly amazing audio experience that recreates a feeling of realism in your sound field — heard through your own speaker systems when binaurally recorded material is played via the processor.



## MC-60/46

### Microcassette Tapes

JVC offers three types of Microcassette tape each in two lengths. The ME-type metal tapes are designed exclusively for music and feature extra-wide dynamic range. The SF and LN are normal types for just about any recording situation — music, lectures, interviews, dictation, etc.

## Stereo Headphones



H-M9T/M7T  
Super-Lightweight Stereo Headphones

H-707/505/404  
Moving-Coil Stereo Headphones

## Microphones



MD-380

MD-280

MD-260

MD-380/280/260  
Uni-Directional Dynamic  
Microphones

M-201  
Electret Condenser Stereo  
Microphone w/M-V Switch



# JVC STEREO CASSETTE DECKS: SPECIFICATIONS

	DD-99	DD-77	DD-66	KD-D55	KD-D50	KD-D40	KD-D4	KD-D35
<b>Frequency Response</b> At -20VU								
•Metal Tape:	25—18,000Hz (±3dB) (40—12,500Hz (±1dB)▲)	30—18,000Hz (±3dB)	30—18,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)
••SA/chrome Tape:	25—18,000Hz (±3dB) (40—12,500Hz (±1dB)▲)	30—18,000Hz (±3dB)	30—18,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)
•••Normal Tape:	25—17,000Hz (±3dB) (40—12,500Hz (±1dB)▲)	30—17,000Hz (±3dB)	30—17,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)
At 0VU								
•Metal Tape:	25—12,500Hz (±3dB) 25—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)
••SA/chrome Tape:	25—12,500Hz (±3dB) 25—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)
<b>Signal-to-Noise Ratio:</b>	60dB•• (Metal)	60dB•• (Metal)	60dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)
<b>Wow and Flutter:</b>	0.055% (DIN 45 500)	0.06% (DIN 45 500)	0.06% (DIN 45 500)	0.16% (DIN 45 500)	0.16% (DIN 45 500)	0.16% (DIN 45 500)	0.16% (DIN 45 500)	0.16% (DIN 45 500)
<b>Crosstalk:</b>	65dB (1kHz)	65dB (1kHz)	65dB (1kHz)	60dB (1kHz)	60dB (1kHz)	60dB (1kHz)	65dB (1kHz)	65dB (1kHz)
<b>Channel Separation:</b>	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)
<b>Harmonic Distortion</b> Total (0VU, 1kHz):	1.0% (Metal) 0.4% (Metal)	1.0% (Metal) 0.4% (Metal)	1.0% (Metal) 0.4% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)
<b>Heads: Record/Playback:</b>	Combination X-Cut SA (Sen-Alloy) Head Two-Gap SA (Sen-Alloy) Head	Combination SE (Super Excellence) Head Two-Gap Ferrite Head	Combination SE (Super Excellence) Head Two-Gap Ferrite Head	Two Metaperm Heads	SA (Sen-Alloy) Head	SA (Sen-Alloy) Head	Metaperm Head	Metaperm Head
<b>Erase:</b>	Quartz-Lock Pulse Double- Servo Motor	Pulse Servo Motor	Pulse Servo Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor
<b>Motor(s):</b>	Quartz-Lock Pulse Double- Servo Motor	Pulse Servo Motor	Pulse Servo Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor
<b>Fast Forward/Rewind Time:</b>	90 seconds (with C-60 Cassette)	90 seconds (with C-60 Cassette)	90 seconds (with C-60 Cassette)	110 seconds (with C-60 Cassette)	105 seconds (with C-60 Cassette)	105 seconds (with C-60 Cassette)	105 seconds (with C-60 Cassette)	105 seconds (with C-60 Cassette)
<b>Input Sensitivity/Impedance</b> Mike x 2: Line In x 2: DIN:	0.2mV/600—10k ohms 80mV/100k ohms	0.3mV/600—10k ohms 80mV/100k ohms	0.3mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms
<b>Output Level/Impedance</b> Line Out x 2: DIN: Headphones:	0—500mV/5k ohms 0—0.6mW (Matching Impedance 8—1k ohms)	0—500mV/5k ohms 0—0.6mW (Matching Impedance 8—1k ohms)	0—500mV/5k ohms 0—0.6mW (Matching Impedance 8—1k ohms)	0—500mV/5k ohms 0—0.6mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)
<b>Power Consumption:</b>	37 watts	30 watts	28 watts	20 watts	20 watts	18 watts	18 watts	17 watts
<b>Power Source:</b>	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz
<b>Dimensions (W x H x D):</b>	435 x 110 x 323mm	435 x 110 x 276mm	435 x 110 x 276mm	435 x 109 x 280mm	435 x 116 x 265mm	435 x 116 x 265mm	420 x 110 x 295mm	420 x 110 x 295mm
<b>Weight:</b>	7.7kg	6.3kg	6.1kg	5.5kg	6.0kg	6.0kg	5.4kg	5.1kg

	KD-D30	KD-D20	KD-D10	KD-W7	D-E5	D-E3	D-M3
<b>Frequency Response</b> At -20VU							
•Metal Tape:	30—15,000Hz (±3dB)	40—15,000Hz (±3dB)	40—15,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	Tape Speed: 2.4cm/second 40—12,500Hz (±3dB)
••SA/chrome Tape:	30—15,000Hz (±3dB)	40—15,000Hz (±3dB)	40—15,000Hz (±3dB)	30—15,000Hz (±3dB)	30—16,000Hz (±3dB)	30—16,000Hz (±3dB)	<ME (JVC Microcassette) Tape>
•••Normal Tape:	30—14,000Hz (±3dB)	40—14,000Hz (±3dB)	40—14,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)	30—15,000Hz (±3dB)	<OA-B111 (OLYMPUS) Tape>
At 0VU							
•Metal Tape:	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	40—11,000Hz (±3dB) 40—8,000Hz (±3dB)	40—11,000Hz (±3dB) 40—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	
••SA/chrome Tape:	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	40—11,000Hz (±3dB) 40—8,000Hz (±3dB)	40—11,000Hz (±3dB) 40—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	30—12,500Hz (±3dB) 30—8,000Hz (±3dB)	
<b>Signal-to-Noise Ratio:</b>	58dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)	58dB•• (Metal)	60dB•• (Metal)	58dB•• (Metal)	52dB•• (Metal)
<b>Wow and Flutter:</b>	0.16% (DIN 45 500)	0.16% (DIN 45 500)	0.2% (DIN 45 500)	0.16% (DIN 45 500)	0.17% (DIN 45 500)	0.17% (DIN 45 500)	0.18% (DIN 45 511)
<b>Crosstalk:</b>	60dB (1kHz)	60dB (1kHz)	60dB (1kHz)	60dB (1kHz)	65dB (1kHz)	60dB (1kHz)	
<b>Channel Separation:</b>	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	40dB (1kHz)	
<b>Harmonic Distortion</b> Total (0VU, 1kHz):	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	1.0% (Metal) 0.5% (Metal)	
<b>Heads: Record/Playback:</b>	Metaperm Head Two-Gap Ferrite Head	Metaperm Head Two-Gap Ferrite Head	Metaperm Head Two-Gap Ferrite Head	SA (Sen-Alloy) Head Two-Gap Ferrite Head	SA (Sen-Alloy) Head Two-Gap Ferrite Head	Metaperm Head Two-Gap Ferrite Head	Metaperm Head Two-Gap SA (Sen-Alloy) Head
<b>Motor(s):</b>	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor	Electronic Governor DC Motor (DC Motor for drawer-type cassette compartment)	Electronic Governor DC Motor DC Motor
<b>Fast Forward/Rewind Time:</b>	105 seconds (with C-60 Cassette)	105 seconds (with C-60 Cassette)	100 seconds (with C-60 Cassette)	110 seconds (with C-60 Cassette)	90 seconds (with C-60 Cassette)	110 seconds (with C-60 Cassette)	120 seconds (with MC-60 Microcassette)
<b>Input Sensitivity/Impedance</b> Mike x 2: Line In x 2: DIN:	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 55mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms	0.2mV/600—10k ohms 80mV/100k ohms
<b>Output Level/Impedance</b> Line Out x 2: DIN: Headphones:	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)	300mV/5k ohms 0.3mW (Matching Impedance 8—1k ohms)
<b>Power Consumption:</b>	17 watts	13 watts	11 watts	22 watts	17 watts	19 watts	19 watts
<b>Power Source:</b>	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz	120/220/240V, 50/60Hz
<b>Dimensions (W x H x D):</b>	435 x 116 x 265mm	435 x 116 x 265mm	435 x 117 x 270mm	435 x 137 x 273mm	340 x 115 x 274mm	340 x 59 x 258mm	340 x 59 x 258mm
<b>Weight:</b>	6.0kg	6.0kg	3.9kg	7.0kg	4.8kg	4.1kg	4.0kg

▲ Figures with ±1dB tolerance apply when the B.E.S.T. Tuning System is employed, and are available from virtually any make of tape.  
● Measured from peak level, weighted, without Dolby-C NR. The S/N is improved by about 15dB at 500Hz, and by about 20dB above 1kHz with Dolby-C NR on.  
• Measured from peak level, weighted, without ANRS/Dolby-B NR. The S/N is improved by 5dB at 1kHz and by 10dB above 5kHz with ANRS/Dolby-B NR on.  
• ME (JVC) Tape • SA (TDK) Tape •• UD (MAXELL) Tape  
(Dolby is a trademark of Dolby Laboratories Licensing Corporation.)

Design and specifications subject to change without notice.

# JVC

DISTRIBUTED BY

## JVC (U.K.) Limited

Eldonwall Trading Estate, Staples Corner,  
6-8 Priestley Way, London NW2, 7AF

Printed in Japan