

JVC HIGH-FIDELITY TURNTABLES

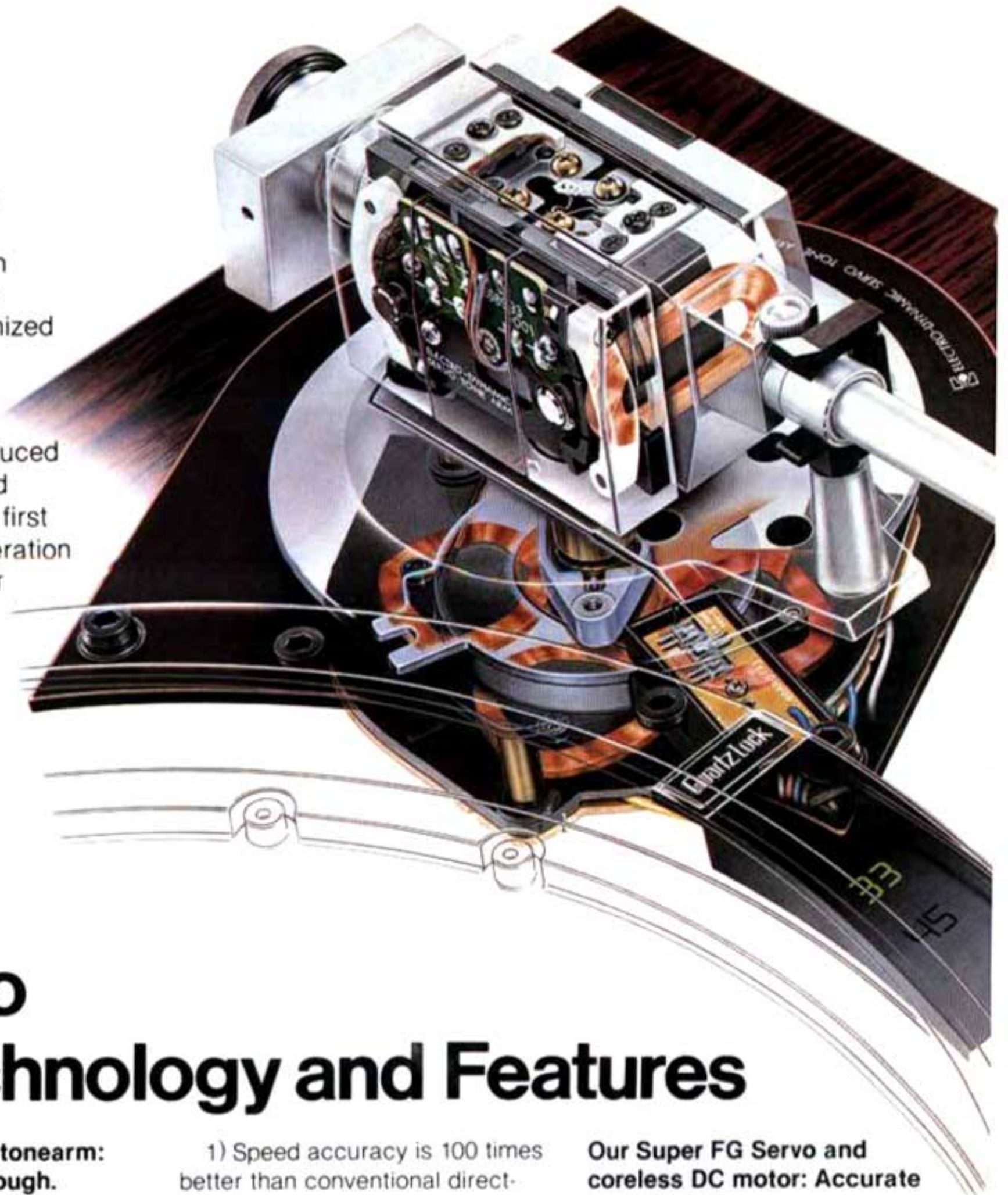


Closer to the Musical Truth

JVC—The Innovators

JVC is a multi-faceted company that is involved in all phases of music, manufacturing both hardware and software—not only audio equipment, but phonograph records and cassette tapes as well. This tremendous advantage is one reason why JVC is currently recognized as a dynamic industry leader—an innovator.

This reputation should not be taken lightly. It means, more often than not, that JVC is first on the scene with the latest audio technology. We introduced the first metal-capable cassette decks; we developed Super-A amplifier technology. And we introduced the first Quartz turntable back in 1974. Here's our latest generation of turntables, featuring such new technologies as our E-D Servo tonearm and linear-tracking systems. JVC—we bring you closer to the musical truth.



A Concise Guide to JVC Turntable Technology and Features

JVC turntables—designed to subdue resonance and vibration.

After JVC brought the speed accuracy of its turntables to near perfection levels, our engineers took a long, hard look at other enemies of accurate music reproduction—extraneous vibration and resonance. These phenomena are related with sympathetic resonance frequencies of turntables—the tendency of turntable components to resonate and vibrate in sympathy with certain sound waves at certain frequencies. JVC has discouraged resonance in various ways in all its turntables. One way is by providing tonearms of low-mass straight designs, mounted firmly on solid bases. Another angle of attack we use is our Electro-Dynamic Servo tonearm.

The JVC E-D Servo tonearm: A genuine breakthrough.

JVC engineers isolated "tonearm resonance" as the most inimical of all conceivable resonance in a turntable, since it colors reproduction, adds distortion (particularly intermodulation) and prevents accurate arm tracking. JVC's new E-D Servo tonearm conquers the enemy we call "sympathetic resonance." See the full description of this remarkable tonearm on the next page.

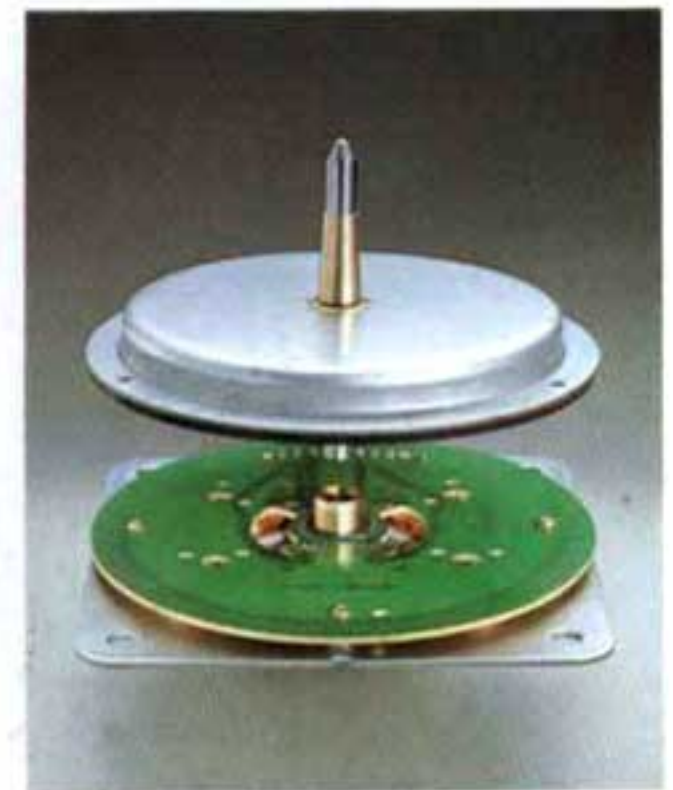
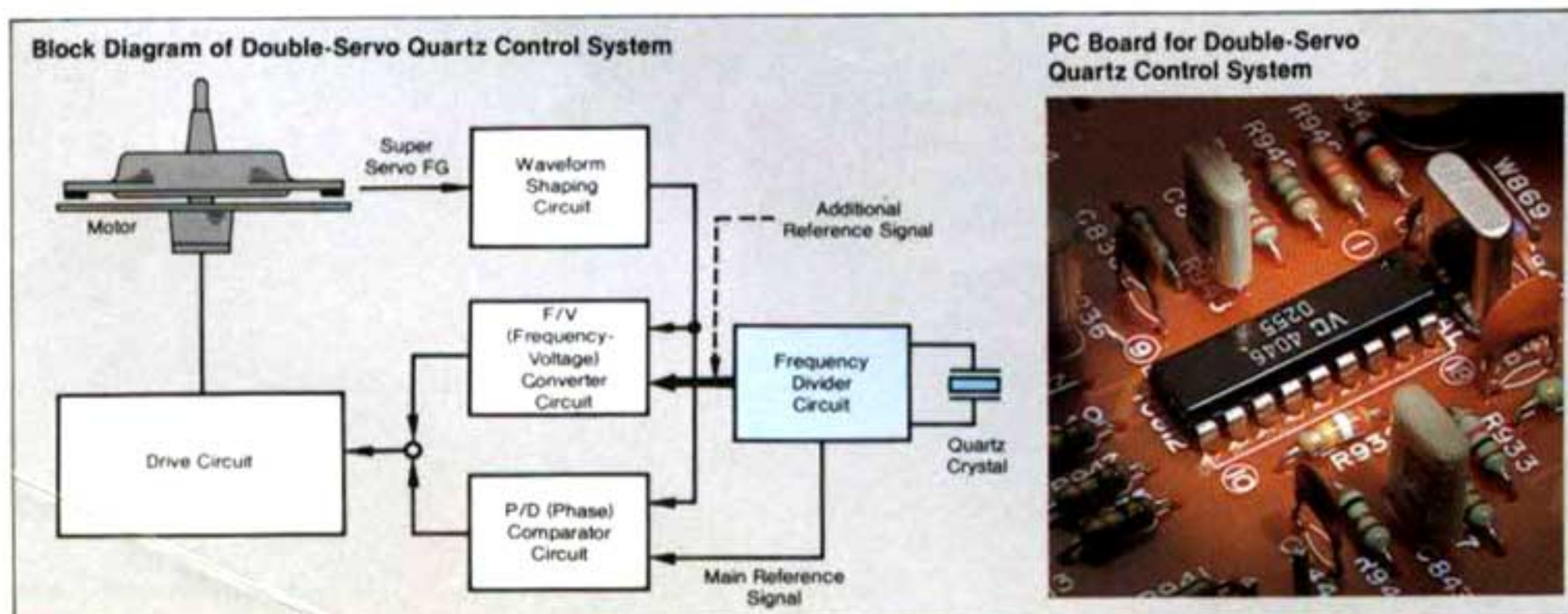
JVC Quartz is the most accurate means to maintain exact platter rotation speed.

Edison invented the phonograph, but JVC made it Quartz back in 1974. JVC's latest generation of quartz direct-drive turntables offers the following advantages:

- 1) Speed accuracy is 100 times better than conventional direct-drives.
 - 2) Speed constancy is 100 times better than conventional direct-drives in terms of temperature and voltage fluctuations.
 - 3) Speed stability is 100 times better than conventional direct-drives in terms of drag, such as caused by record cleaners or even by the heavily modulated grooves of explosive new digital recordings.
- In 1978, JVC came up with yet another advance—Double-Servo Quartz control—which is thirty times more accurate than conventional Quartz designs.

Our Super FG Servo and coreless DC motor: Accurate and cog-free.

In all JVC Quartz turntables, our Double-Servo Quartz control system is complemented by a JVC Super FG Servo for accurate speed detection, and a coreless DC motor for accurate rotation. The former employs phase comparison and output integration for absolute accuracy, while the latter is cog-free, yet high in torque. Little wonder, then, that every JVC Quartz turntable delivers only 0.025% or less wow and flutter (WRMS) and provides an exceptional 75 dB or better signal-to-noise ratio (DIN-B).



Coreless Direct-Drive Motor with Super Servo FG

JVC Electro-Dynamic Servo Tonearm

Resonance and resonance damping.

The role of any tonearm is to keep the phono stylus in close contact with the record groove without impeding movement of the stylus itself as it traces the microscopic undulations of the record. In practice, it is the rare tonearm—whether dynamically or statically

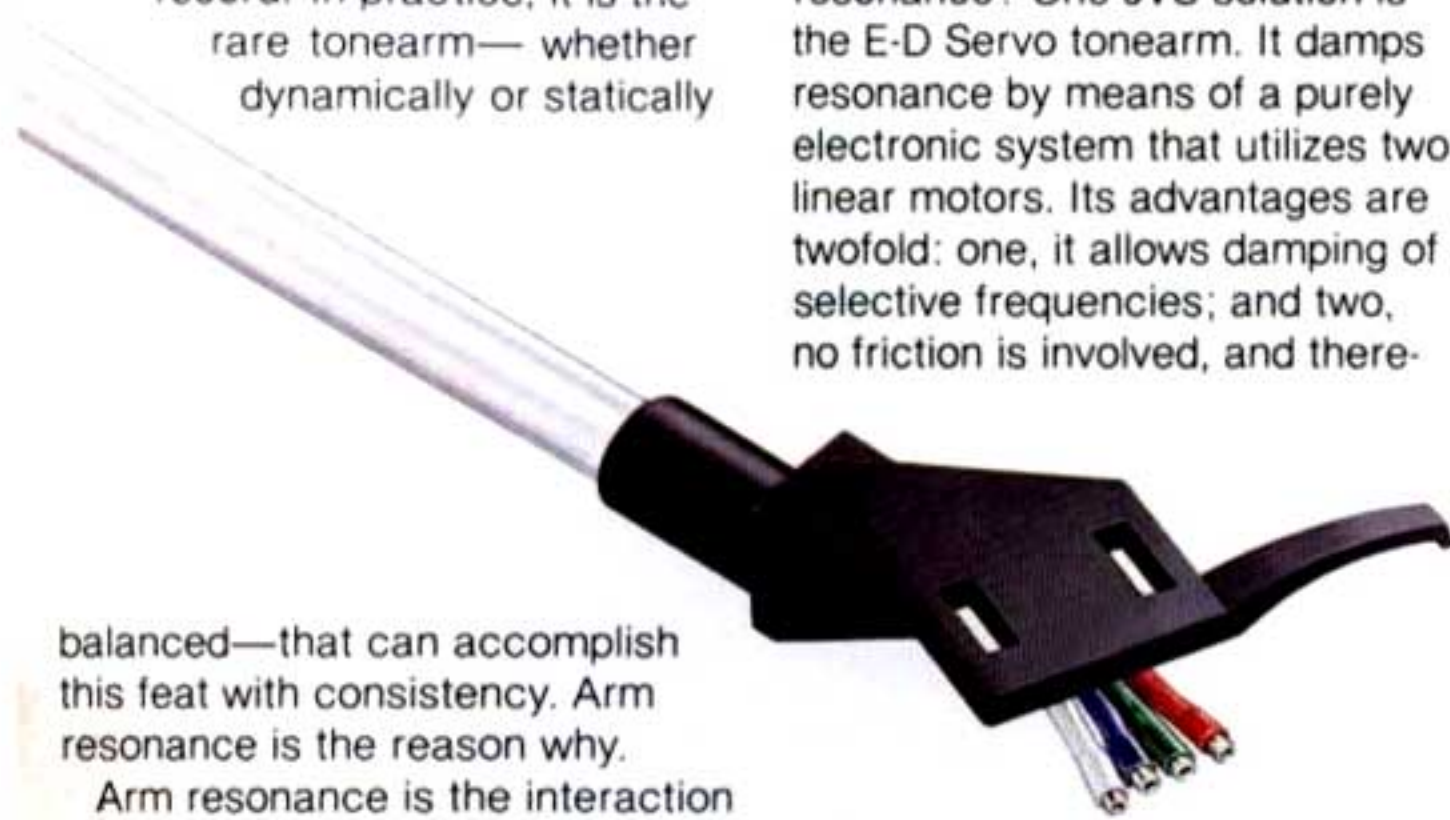
nance may be excited excessively by heavy modulation, by eccentricities or by record warps. It causes intermodulation distortion in reproduced music; at worst, it can push the stylus out of the groove and render record play impossible.

How do we overcome or "damp" resonance? One JVC solution is the E-D Servo tonearm. It damps resonance by means of a purely electronic system that utilizes two linear motors. Its advantages are twofold: one, it allows damping of selective frequencies; and two, no friction is involved, and there-

balanced—that can accomplish this feat with consistency. Arm resonance is the reason why.

Arm resonance is the interaction of a tonearm's mass and the compliance of the cartridge. The frequency of arm resonance (f_0) is usually 10Hz or less. Reso-

fore sensitivity is not sacrificed in order to achieve effective damping. These are the two reasons



why the E-D Servo system is superior to conventional viscous damping systems.

The E-D Servo tonearm: Its construction.

Two coreless linear motors are used in the E-D Servo tonearm. One, housed inside the structure containing the vertical bearing, controls and adjusts the arm's vertical position in relation with the record's surface. The other, positioned below the tonearm base, controls and adjusts the arm's horizontal position in relation to the record groove.

The E-D Servo tonearm: How it works.

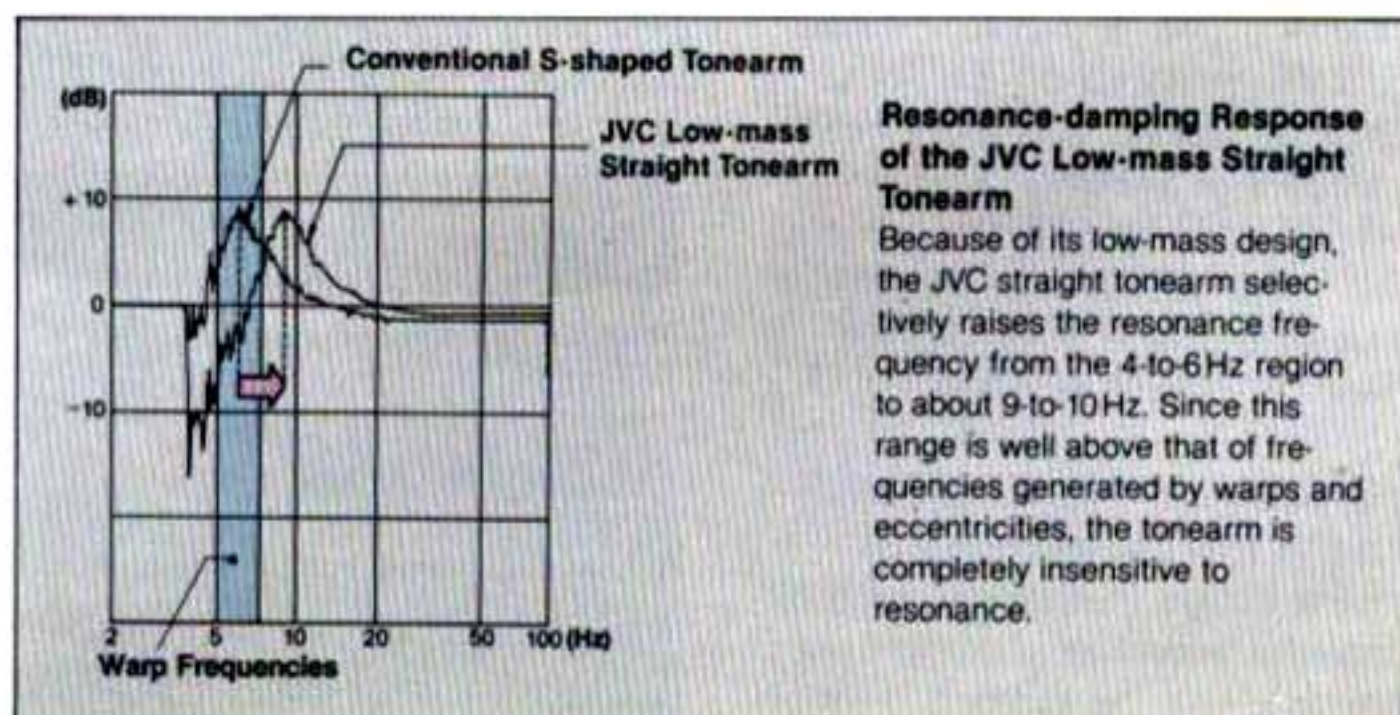
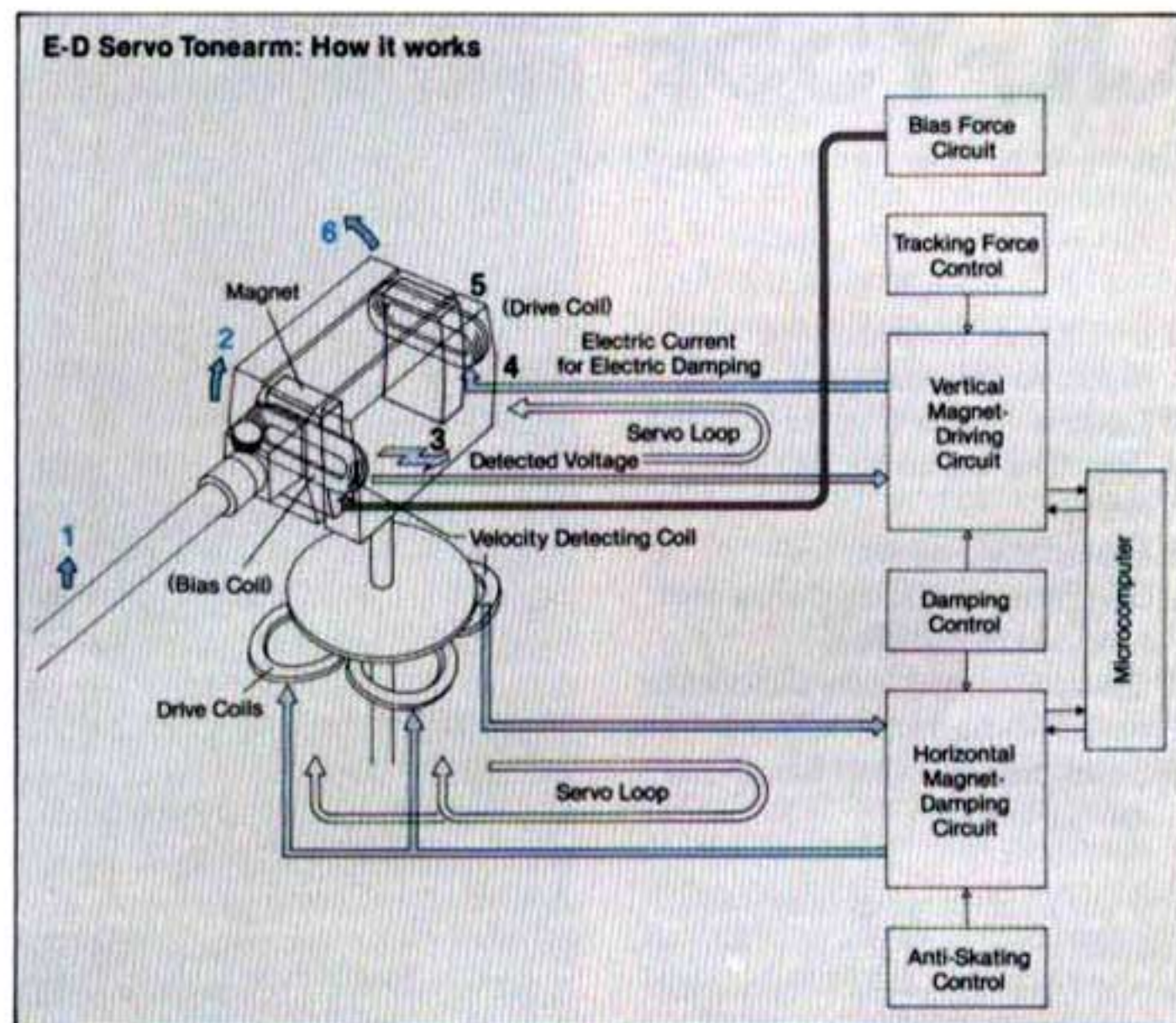
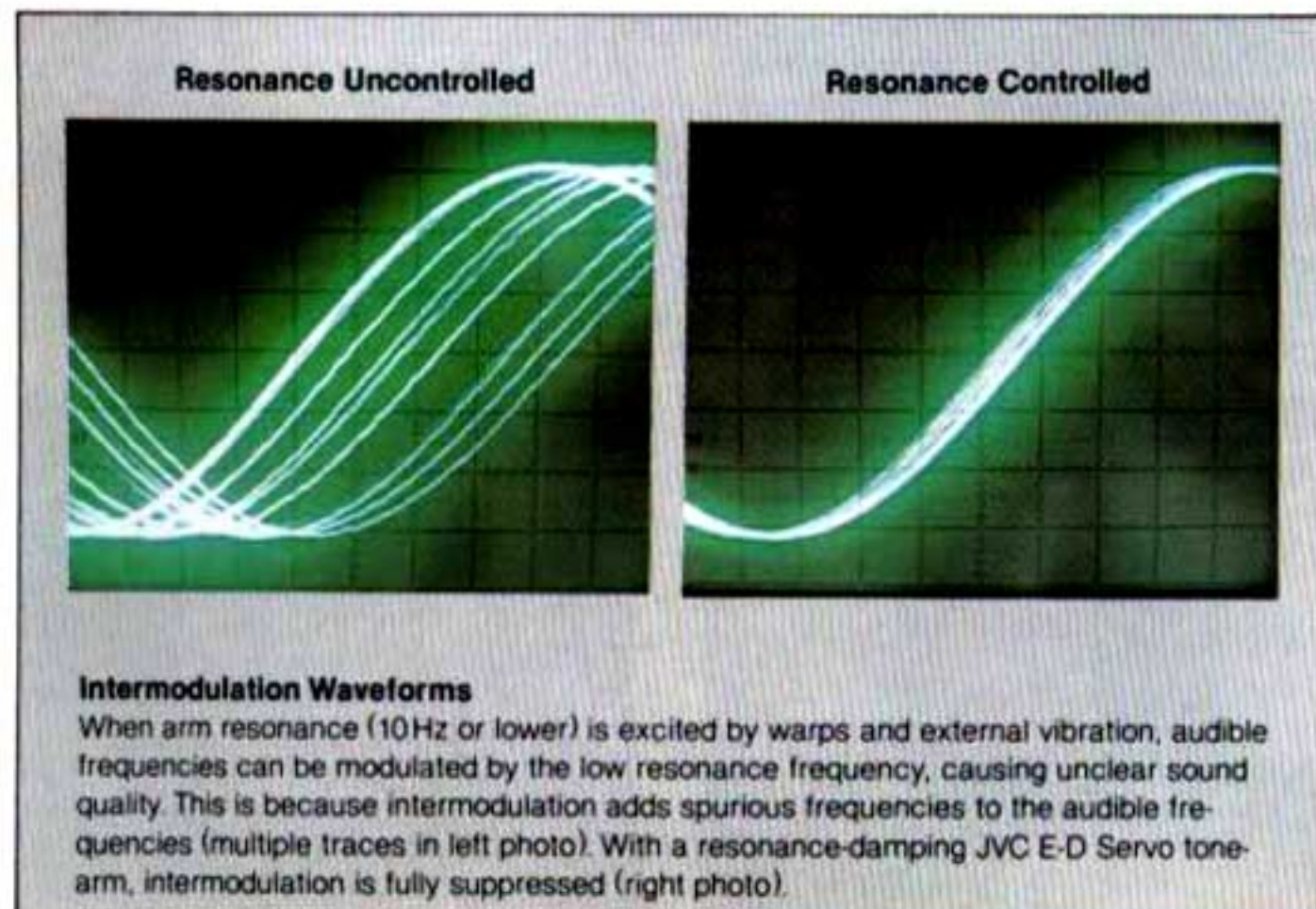
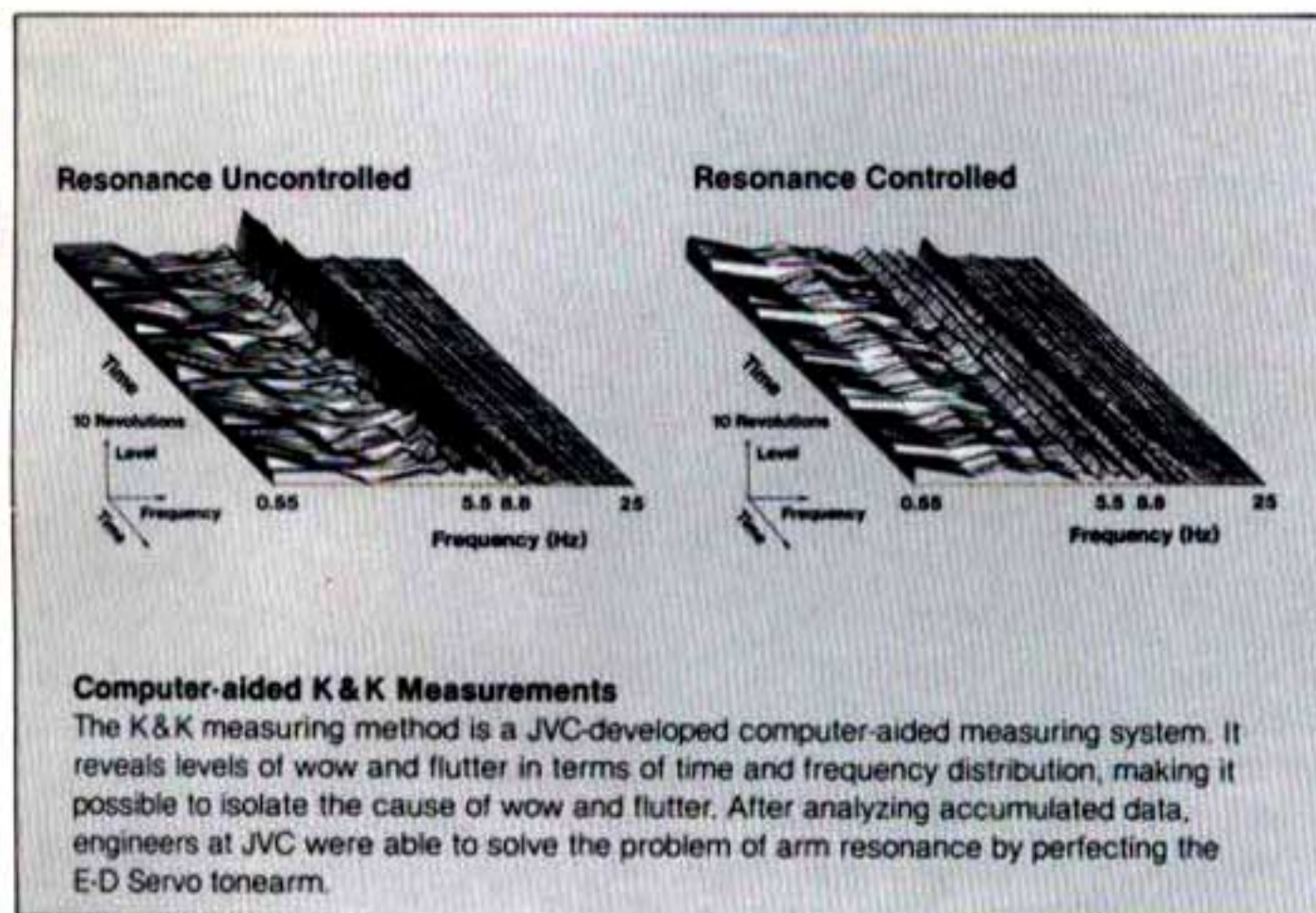
Picture the tonearm (1) being pushed up by the uphill rise of a warp (see illustration below). This action causes the magnet for vertical velocity detection (2) to turn, generating a corresponding voltage in the velocity detection coil (3). This voltage is then amplified and sent to the vertical linear motor (4), or to be more exact, to the drive coil (5). This voltage interacts with a magnetic field around the coil to develop a counterforce (6), whose direction is opposite to that of the initial force. A downward force is

thus generated to keep the stylus at the tip of the tonearm in close contact with the record surface. Naturally, this entire cycle takes only a fraction of a millisecond.

Resonance damping, tracking and anti-skating force adjustments are electronically achieved.

Despite all its complex technicalities, the E-D Servo tonearm is easy to adjust. Rotary knobs let you directly adjust tracking force, anti-skating force and resonance damping. All you have to do is match the figure on each knob ("1" for 1 gram of tracking force, for instance), with the requirements of your cartridge.

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





QL-Y55F Electronically Controlled Tonearm Assures Better Reproduction Quality

Electro-Servo Fully Automatic Quartz Turntable

- E-D Servo tonearm for reduced resonance
- Double-Servo Quartz control
- Cog-free coreless DC servo motor
- Electronic resonance-damping, tracking-force and anti-skate controls
- Computerized fully automatic convenience with repeat
- Solid cabinet with luxurious mirror finish

The QL-Y55F attacks unwanted resonance in a new way—actively rather than passively—by means of a sophisticated Electro-Servo tonearm. This remarkable tonearm also allows hands-off left-right, up-down cueing, and in-play adjustment of tracking force, anti-skating and damping. Matched to this tonearm is an extraordinarily accurate platter drive system. Read on for more details.

Warped records? No problem for the E-D Servo tonearm.

Visible warps that render records unplayable on lesser equipment are no challenge to the E-D Servo tonearm of the QL-Y55F. Even

problems such as low-frequency infrasonics caused by tiny, imperceptible warps, or external vibration are dramatically reduced. The overall result is better tracking, lower distortion, a higher signal-to-noise ratio and even better wow & flutter.

Light-touch controls and fully automatic operation for a unique operating experience.

All arm movements—lead-in/lead-out, up/down, left/right—are performed by means of light-touch buttons, rather than by imprecise human hands. When the turntable is operated automatically, a microcomputer supervises operation with impeccable preci-

sion. Additional light-touch buttons provide speed and size selection.

Three additional controls electronically "bias" the tonearm to apply accurate resonance damping, tracking force and anti-skating force. A convenient pushbutton feature called "Zero Balance" permits easy arm balancing at a touch. If a power failure occurs during playback, the arm tilts up to protect the stylus tip from damage.

High torque coreless DC servo motor is cog-free.

Our coreless DC servo motor has no cores for cog-free, smooth rotation, yet boasts high 1.5kg-cm torque for quick starts and even smoother performance.

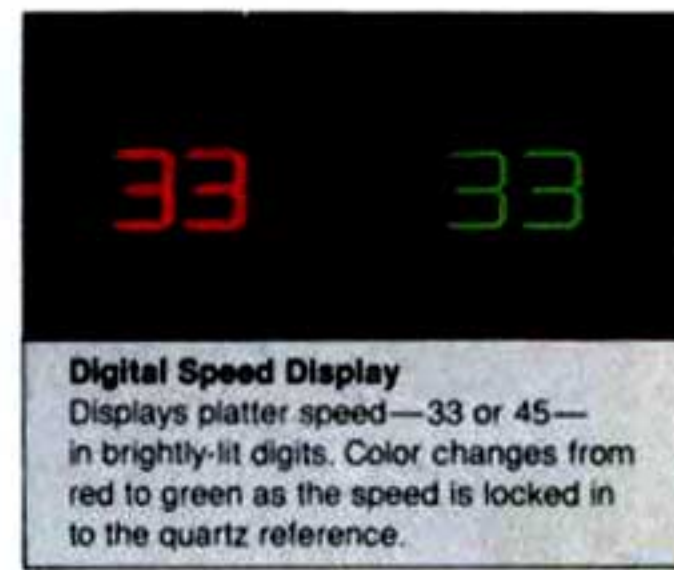
Our advanced Double-Servo Quartz system provides unwavering speed accuracy.

Speed accuracy is 30 times more accurate thanks to the Double-Servo Quartz speed detection system that monitors and adjusts platter speed with electronic precision.

- Tapered, low-mass straight tonearm.
- Resonance-free solid cabinet.
- TH (Tracing Hold) for high arm sensitivity.
- Low-center-of-gravity insulators for high cabinet stability.



E-D Servo Tonearm



Digital Speed Display
Displays platter speed—33 or 45—in brightly-lit digits. Color changes from red to green as the speed is locked in to the quartz reference.



QL-Y7

Electro-Servo Quartz Turntable

**State-of-the-Art Technology
Ends Resonance and Vibration**

- JVC Electro-Dynamic Servo tonearm for reduced resonance
- Double-Servo Quartz control
- Cog-free coreless DC servo motor
- Electronic control of Q-damping, tracking force and anti-skating
- Computerized tonearm operation



The Electro-Dynamic (E-D) Servo tonearm of the QL-Y7 is controlled by two coreless linear motors—one to balance the tonearm in the horizontal plane, the other to balance the tonearm in the vertical plane. Working together with two electro-mechanical servo systems, the QL-Y7's tonearm damps resonance and allows the play of even severely warped records. Optimum tracking force and anti-skating force are electronically applied to the arm. Three simple controls for this tonearm make operation a snap.

Other standard features include a cog-free coreless DC servo motor regulated by a Double-Servo Quartz system for amazing speed accuracy, and foolproof computerized tonearm operation. Completing the QL-Y7 are convenient up-front controls, a vertical tonearm height adjustment, and LED indicators for platter speed. And befitting a state-of-the-art turntable, there's one final touch: A solid, sturdy cabinet trimmed with rosewood veneer and polished to a rich mirror-like finish, for a truly luxurious furniture appearance.



QL-Y3F

Electro-Servo Fully Automatic Quartz Turntable

**Electronic Tonearm Technology
Teamed with Quartz Precision**

- E-D Servo for horizontal arm movement
- Double-Servo Quartz control
- Cog-free coreless DC servo motor
- Computerized fully automatic convenience with repeat
- Height adjusting mechanism for tonearm, LED indicators for speed, quartz-lock and record size



The QL-Y3F is a fine combination of traditional JVC workmanship and high-technology JVC features. Foremost of these features is the E-D Servo system that controls horizontal arm movement. A coreless linear motor with a horizontal velocity detection system is used to combat resonance which can cause intermodulation distortion.

Also featured in the QL-Y3F are the same Double-Servo Quartz control system and cog-free coreless DC Servo motor design used in our more costly turntables, providing impeccable long-term speed accuracy. Despite all this technology, the QL-Y3F is easy to use thanks to microcomputer-controlled fully automatic operation. The microcomputer, a programmed-to-order LSI, coordinates all circuits and controls for error-free fully automatic operation, including platter start, cueing, lead-in, lead-out and end-of-play shutoff.

Other features include soft-touch up-front controls, an adjustable-height tonearm and LED indicators for speed, quartz-lock and record size.

JVC Linear-Tracking Turntables — Our Goal is Zero Tracking Error



Tonearm Geometry

The grooves of a modern LP record are the ultimate result of a linear-tracking master cutting machine. As the cutting head with its stylus moves in a straight line from edge to center of the master, a spiral groove is inscribed on the disc. It's apparent, therefore, that a record should be played back in the same manner—by a tonearm that moves across in a straight line, maintaining the stylus tangent to the groove at all times.

"Tracking error" (otherwise called "tracking angle error") is an angular deviation from tangency that necessarily occurs when a standard pivoted tonearm plays a record. Although this error is usually reduced to negligible proportions by optimizing geometry—the offset angle, length of the tonearm and the stylus overhang—it is never eliminated. This is because the tip of the tonearm traces an arc, not a straight line, across the surface of the record.

Tracking error affects music by increasing distortion, and it is

most apparent during the play of inner grooves. A straight-line, linear-tracking tonearm, by definition, exhibits essentially *no* tracking error.

JVC's comprehensive lineup of turntables features three models with linear-tracking tonearms—models L-E5, L-E3 and L-E600.

The Linear-Tracking Tonearm: Its Advantages

A linear-tracking tonearm always keeps the stylus perpendicular to the record grooves at all points across the record surface. By following the path of the record cutter head, the arm keeps the stylus's contact with groove walls always optimum. Here are the intrinsic advantages of linear tracking:

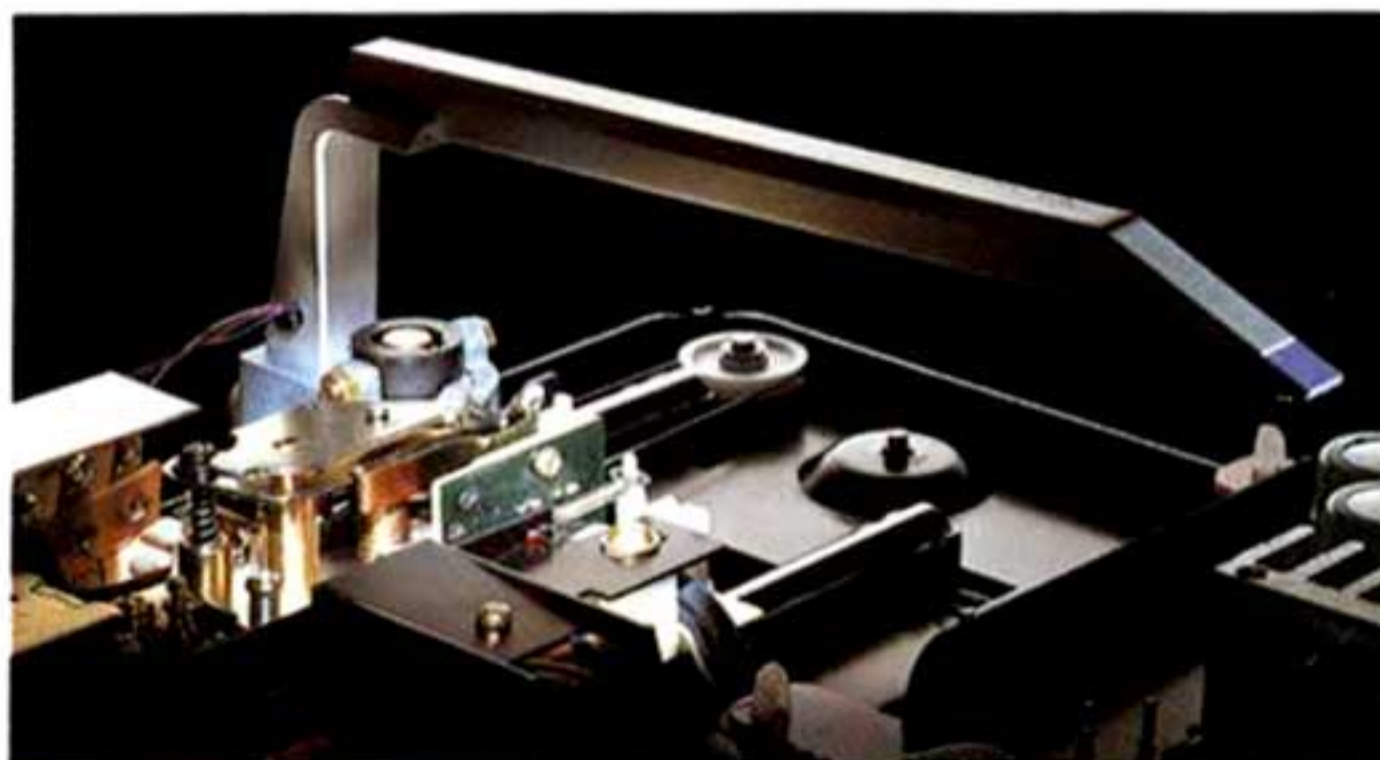
1) Harmonic distortion is greatly reduced since tracking error is almost entirely eliminated.

2) Theoretically, skating force (that is, centripetal force directed toward the center of the record and generated as a record spins) is eliminated, which improves channel separation and reduces intermodulation distortion. Sound with superb localization results.

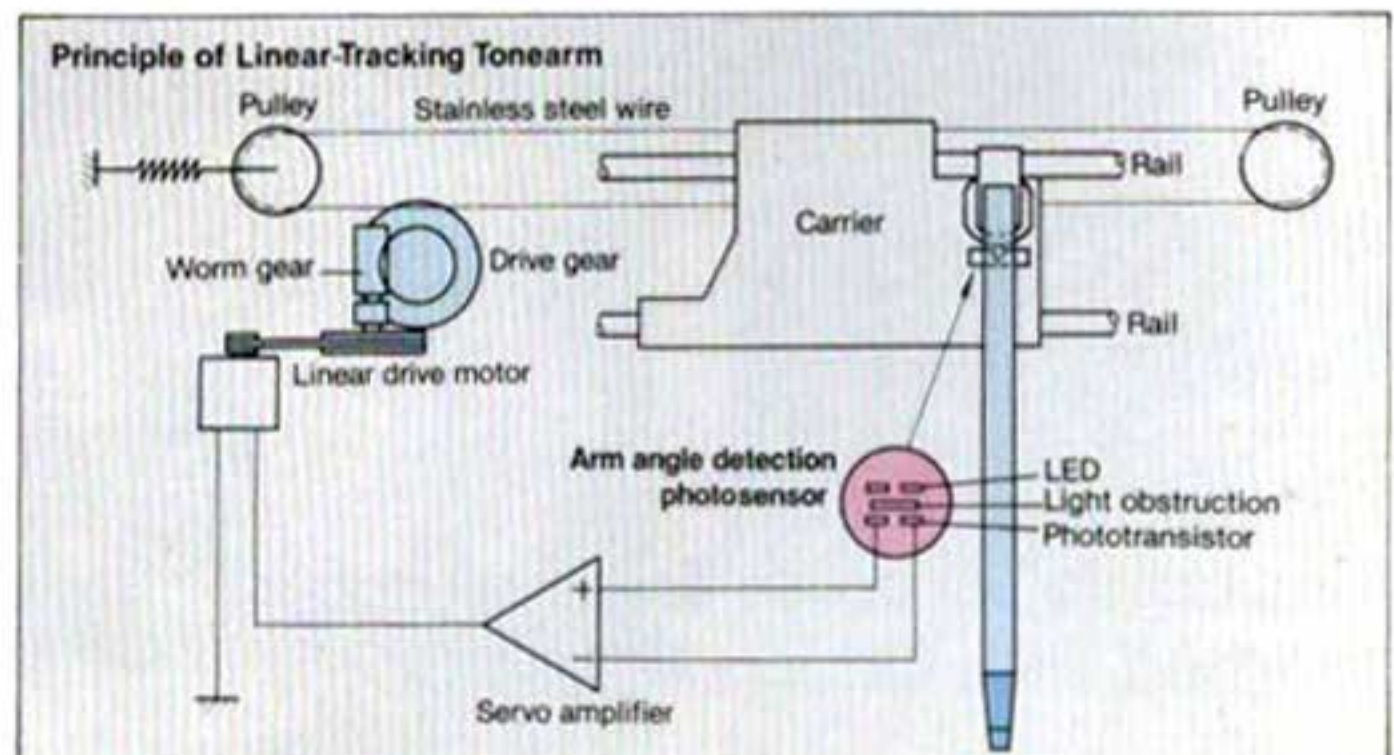
3) The tonearm length can be greatly reduced, which results in lower effective mass. This reduces the chance of record warps and eccentricities exciting low-frequency resonance. Intermodulation distortion, therefore, is lower.

As shown in the diagram below, JVC's linear-tracking tonearms

make use of a non-contact optical system to detect deflection angles. The moment the tonearm is deflected from perpendicularity to the groove, it is gently moved—ever so slightly until tracking error is eliminated—by an advanced servo circuit having a microcomputer at its heart. This same microcomputer also makes possible the various automatic functions of our linear-tracking turntables.



Tangential Arm Drive Mechanism





L-E3 Linear Tracking for Accuracy, Automatic Features for Easy Operation

Fully Automatic Linear-Tracking Turntable

- Linear tracking for zero tracking error
- Newly-designed low-mass tonearm with integrated cartridge
- Compact size—only 340 mm (13-3/8 inches) wide
- Computer-supervised fully automatic operation
- Automatic disc size selector
- JVC coreless DC FG Servo motor

The L-E3 not only has the advantage of linear tracking to eliminate problems associated with tracking error; it also has an advanced drive system utilizing our coreless DC FG Servo motor, and a whole raft of automatic functions including automatic disc size selection—and speed setting—by means of an optical system. Together, all this technology will bring out the best from your entire record collection for years of beautiful listening and reliable performance.

Zero tracking error means more faithful music reproduction.

The tonearm of the L-E3 is linear-

tracking to eliminate tracking error. A no-contact optical system is incorporated to detect any deviation from perpendicularity. It signals the servo system which moves the tonearm base until the tonearm is optimally perpendicular again. The entire process takes place so rapidly and accurately that tracking error remains essentially zero at all times.

Resonance is avoided by means of a short, low-mass straight tonearm.

Not only does the simple, low-mass straight design of the L-E3's tonearm reduce resonance; it also requires no complex anti-skating compensation devices since it is linear-tracking.

Fully Automatic Operation is all computer controlled.

Three easily-accessible buttons

operate all functions of the L-E3: Start-Stop, Left-Right Cueing, and Up-Down Cueing. Operation couldn't have been made simpler or more foolproof.

Record size and speed selection is automatic for even more convenience.

We've given the L-E3 a lighthouse-like structure that helps the turntable determine what size record is on the platter. This optical system ensures that during automatic operation, the tonearm lowers at just the right position for any record. When an LP is detected, the 33-1/3 rpm speed is automatically selected; when a 45 is detected, the 45 rpm speed is automatically selected.

Integral low-mass dual-magnet cartridge is supplied.

With every L-E3 comes an integral

low-mass dual-magnet cartridge, a variation on the popular MM (Moving Magnet) theme featuring high tracking ability. But for those who prefer the crispness and transient performance of an MC (Moving Coil) cartridge, JVC has optionally available model MC-E3E. Since its output is high, it directly mates with the normal magnetic phono inputs of your receiver or amplifier.

- Pitch control for $\pm 3\%$ speed adjustment.



Optional High-Output MC Cartridge (MC-E3E)



Automatic Disc Size Sensor



L-E600 A Compact Turntable with Grown-Up Features

Fully Automatic Linear-Tracking Turntable

- Linear tracking for zero tracking error
- New tonearm design with low-mass cartridge
- Compact size—only 340mm (13-3/8 inches) wide
- Electronically controlled, fully automatic operation
- Accurate DC FG servo motor

The L-E600 is a new idea from JVC in compact, full-feature turntables. Its newly-designed linear-tracking tonearm is the reason behind its compact dimensions, and the reason behind its impressive low-distortion performance. It is also extra-easy to operate, thanks to electronic operation, front panel controls and built-in safety features.

Unusual linear-tracking system provides performance and protection.

A linear-tracking tonearm provides lower distortion and wider stereo separation. In the L-E600, it also provides protection. The tonearm, mounted on the lid, cannot be operated until the lid is fully

closed. Opening the lid during play immediately stops the platter and returns the tonearm to rest. It is inconceivable that your records or the L-E600's cartridge can be damaged by accident or by improper operation.

An extremely short tonearm means lower effective mass and lower resonance.

The unusual design of the L-E600 has made possible the use of an extremely short tonearm. The problem of resonance, so prevalent with long tonearms, is neatly avoided.



Cartridge Position Indicator

Fully Automatic Operation is a snap.

The L-E600 has but three light-touch operation controls: an Up/Down cueing button, a Start button and a Stop button. During manual operation, the Start and Stop buttons double as Left/Right tonearm cueing controls.

- Belt-drive DC FG Servo motor for excellent speed accuracy.
- Integral low-mass dual-magnet cartridge, a variation on the MM type.
- LED indicators for manual/auto operation.
- Record size and speed selectors.





L-F71 JVC's Multi-Talented Performer

Electro-Servo Fully Automatic Direct-Drive Turntable with "Music Scan"

- JVC "Music Scan" for random cueing
- E-D Servo for horizontal arm movement
- Low-mass straight tonearm
- Cog-free coreless DC servo motor
- Computerized fully automatic convenience

Superb tracking and utmost operating convenience are happily and harmoniously combined in the L-F71 from JVC. An E-D Servo system is built in to damp arm resonance for better tracking. JVC "Music Scan" automatically scoots the tonearm right over to

the beginning of any song you want to hear.

JVC "Music Scan" for random cueing.

Just punch in the track number of the song you want to start listening to. Our special optical system in the headshell tells the tonearm where to set down. "Skip" lets you jump right to the beginning of the next selection.

E-D Servo controls horizontal arm movement and damps resonance.

By designing a straight, low-mass tonearm and coupling it with our

E-D Servo system that controls its horizontal movement, we succeeded in damping arm resonance. The L-F71 is totally and effectively protected against mistracking and coloration.

Computerized fully automatic operation via front-panel touch buttons.

Touch any of the operating buttons and the programmed-to-order microcomputer supervises the order of events flawlessly. Since the L-F71 is fully automatic,

you need not touch the tonearm at any time.

Smooth coreless DC servo motor and FG Super Servo.

Our exclusive cog-free coreless DC servo motor and FG Super Servo speed control account for the superb performance of the L-F71.

- Wired remote control (optional).
- Pitch control and repeat.



LED "Music Scan" Indicator and Track Button—If you want to hear the third band on a record, tap the TRACK button three times (that is, until the indicator shows the digit "3") and then tap START/STOP; the record will be played back from the third band on.

Skip Button—Just a light touch and the stylus cues in on the very next selection on the record.



The headshell contains an optical system that focuses infrared light (shown as dotted line in photo) on the record surface and detects reflections from the shiny inter-song bands. This tells the computer how many selections there are, and where the tonearm should descend.



RM-71 Remote Control Unit (Optional)—Controls the L-F71 from across the room. Buttons include: REPEAT, SIZE, SPEED, TRACK, SKIP, START/STOP and UP/DOWN CUE.



QL-F61 Advanced Tonearm Design Complements a Quartz Drive System

Quartz-Locked Fully Automatic Direct-Drive Turntable

- Double-Servo Quartz control
- Cog-free coreless DC servo motor
- Low-mass straight tonearm
- Fully automatic with repeat

The QL-F61 is more than just sleek, slim and solid; it's jam-packed with futuristic JVC technology. One example is advanced Double-Servo Quartz control that maintains platter speed with unerring accuracy. Another is the coreless DC motor; it's brushless, coreless and cog-free. The arm is of the low-mass straight line type for better tracking. For convenience's sake, the turntable is fully automatic from cue-in to end-of-play shutoff.

Smooth platter rotation is assured by the JVC-made coreless DC motor and Double-Servo Quartz control. Our ideally matched motor and servo system achieve unimaginably low wow & flutter of 0.025% (WRMS). Never again will varying pitch, however insignificant, mar your musical enjoyment, even if your record is of the latest direct-

to-disc or digital variety that tends to cause platter "drag."

Low-mass straight tonearm for lighter, better tracking.

Conventional high-mass tonearm-cartridge combinations can produce harmonic distortion on the order of 10% when tracking even a barely visible record warp. But the tonearm of the QL-F61 reduces distortion to practically nil even on moderate warps because of its low-mass design. Low mass means a higher resonance frequency (slightly above the warp frequency), a reduced resonance peak, and higher sensitivity. The straight contour

of the arm ends spurious movement of the arm due to dynamic torsion.

Up-front controls for your convenience.

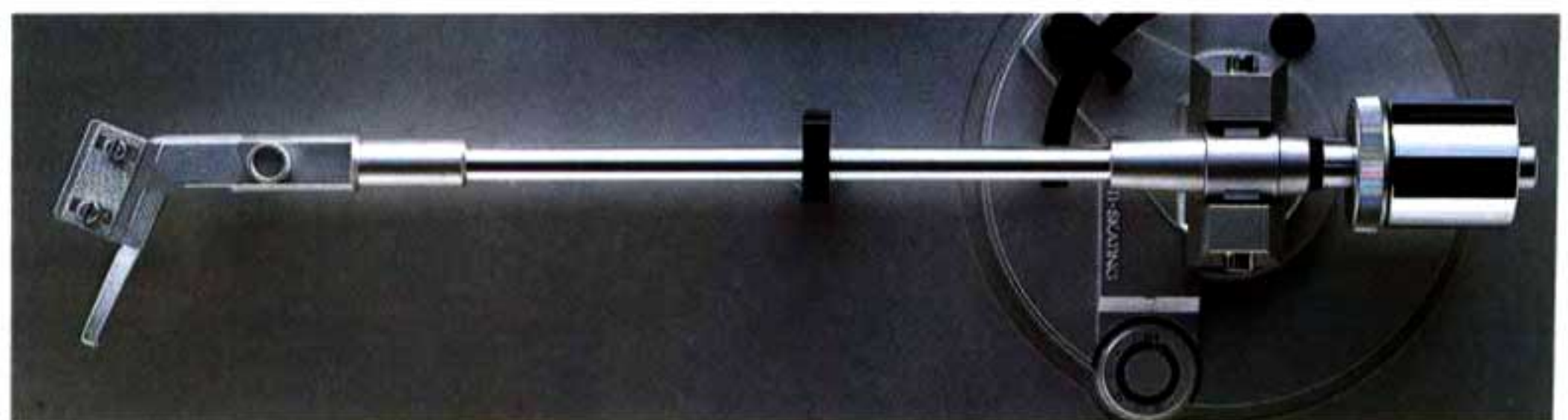
Gone is the cluttered look that keeps you away from the controls when the dust cover is closed. Along the front edge of the QL-F61 are all the operation buttons—"touch" buttons—for record speed, pitch control, quartz on/off, repeat, record size, start/stop and even arm cueing.

Fully automatic operation with repeat.

Operation is completely automatic

from beginning of play to end; there's never any need to touch the tonearm. This is a definite plus when there are kids around who may not be particularly adept at handling the tonearm. Records and stylus are protected. If you get in the mood, push the Repeat button for repeat playback of one side.

- Pitch control ($\pm 6\%$).
- Non-resonating firm carbon-fiber-mixed resin headshell.



Low-mass Straight Tonearm



QL-A51 Technology in the Round

Quartz-Locked Auto-Return Direct-Drive Turntable

- Double-Servo Quartz control
- Cog-free coreless DC servo motor
- Low-mass straight tonearm
- Front edge controls
- Auto return convenience and pitch control

The QL-A51 from JVC differs from the more expensive QL-F61 on the preceding page in only two ways: it lacks a repeat function and full automation. Otherwise it's the spittin' image of the QL-F61, including the precision motor, straight tonearm and up-front controls. From the tip of its highly sensitive tonearm to its cabinet base, it's one of our most attractive models—and musical reproduction will be just as attractive; resonance and mistracking have become problems of the past.

Our direct-drive Double-Servo Quartz motor has no core. Double-Servo Quartz control—a JVC exclusive—keeps a constant check on the actual platter speed, speeding up or slowing down the motor instantly if any speed error is detected. More-

over, the servo motor is of our own coreless design, to avoid cogging, the annoying rotational fluttering which can spoil music reproduction. Long-term accuracy and reliability are assured throughout this sophisticated direct-drive turntable.

Rigid, non-resonant straight-line tonearm.

Our tonearm is of the straight-line design for a reason. The reason is to better handle record warps and to ensure clean low-frequency response which is even more important now that digital and direct-cut records are available.



Quartz-referred Stroboscope

By being low in mass, our tonearm keeps its resonance frequency above the warp frequency, while suppressing the resonant peak, so that the lowest musical signals can be reproduced without a trace of muddiness. Mechanical strength is another important feature for surer tracking and higher resistance to torsion.

Up-front controls for all operations, including arm cueing.

Taking a design tip from the more expensive and elaborate turntables in our lineup, we've given the QL-A51 still more appeal with

a system of simplified, up-front controls. All can be used with the dust cover closed. And unlike other models in this price range, it has the cueing control up-front. Every care has been taken to prevent unnecessary record handling—from the manual cue control to the automatic arm lift, return and power shutoff at the end of play.

- Pitch control ($\pm 6\%$). A pointer-indicator identifies the selected pitch.
- Non-resonating, firm carbon-fiber-mixed resin headshell.



Pitch Control

Pitch Indicator

Quartz-Lock Button



L-F41 More Reliable Tracking, Less Arm Resonance with JVC's New Tonearm

Fully Automatic Direct-Drive Turntable

- Cog-free coreless DC servo motor
- FG direct-drive system
- Low-mass straight tonearm
- Front-edge controls
- Fully automatic with repeat

Longing for quality, but short of bread? Look no longer: JVC's L-F41 is long on performance, and built to last a long, long time. It's a remarkable combination of JVC's famed FG direct-drive coreless DC servo motor and all the automatic conveniences you could ever ask for in a hi-fi turntable. A touch of a button and music is yours to enjoy. A touch of another and the tonearm is quickly and silently sent back to its rest and power is shut off.

JVC coreless DC servo motor + FG direct-drive = Consummate accuracy.

To all intents and purposes, wow & flutter is gone—gone forever. Two JVC exclusives combine to eliminate it: a coreless, high-torque DC servo motor for ripple-free rotation and an ultra-

responsive FG Super Servo system. Any speed errors—due to sudden stylus acceleration caused by sudden musical attacks, for instance—are instantly detected and compensated for before they can cause the slightest change in pitch in reproduced music.

Low-mass straight tonearm for surer tracking.

What goes up must come down, and in terms of tonearms, the lower the mass the better the tracking and the less the chance for record damage. Our low-mass tonearm is not pushed around unnecessarily, causing distortion and poor channel separation. Its straight design means more mechanical rigidity and precision. At the head of the arm is a carbon-fiber-mixed resin shell that is firm and does not resonate. The tonearm of the L-F41 can truly be thought of as acoustically "transparent."

Direct access to all controls with the dust cover closed.

Like all other JVC turntable models, all essential controls are up front, on the edge outside the closed dust cover. Even the arm cue control, usually located at the base of the tonearm, is up front for easy, accurate cueing. Naturally, controls operate under the lightest pressure.

Fully automatic operation is accurate.

Except for the Quartz control system, the L-F41 is essentially identical to the more expensive

QL-F61, offering the same kind of classy operating feel and convenience. Thanks to a precision mechanism, automatic operation is accurate and noise-free. And thanks to its repeat function, you can hear one entire side of a record repeatedly.

Stroboscope and pitch control.

It's easy to stay on pitch with the stroboscope of the L-F41. And it's equally easy to tune the pitch of your records to that of a musical instrument for a duet or an ensemble. Total pitch control amounts to about a semitone.



Newly-Designed Automatic Mechanism



L-A31

Auto-Return Direct-Drive Turntable

Fine Features Aplenty

- Cog-free coreless DC servo motor
- FG direct-drive system
- Low-mass straight tonearm
- Up-front controls
- Auto return convenience and pitch control

Sharing many features with JVC's more advanced turntables is the L-A31. It has the cog-free coreless DC servo motor for smooth rotation and high torque, and our FG direct-drive system for speed accuracy. Rotational speed is constantly adjusted against any variations, whatever the cause, to minimize variations in pitch.

Our low-mass straight tonearm is consistent with current thoughts on the subject; low-mass improves tracking, allowing the use of high-compliance cartridges. Its straight design further reduces mass and increases rigidity. Resonance is optimally just above warp frequencies while remaining below audible frequencies.

Operation is simple, convenient and smooth. Controls—even arm cueing and pitch control—are up-front, outside the closed dust cover. End-of-play auto return convenience is another amenity you'll appreciate; once you set the arm on the record and start play, you need not touch it again. Our ultra-light non-resonating headshell is also included.



L-A10

Auto-Return Belt-Drive Turntable

Stylish Lines and Superior Performance

- Quiet and accurate belt-drive system
- Precision synchronous motor
- Low-mass straight tonearm
- Up-front controls
- Auto return convenience

The L-A10's design objective was to provide performance and features at a price easily accessible to anyone. Among its many features, two in particular stand out: a low-mass straight tonearm that provides excellent tracking ability and low distortion while keeping resonant frequencies at bay; and a silent and powerful belt-drive system utilizing a precision synchronous motor. The belt-drive system neatly isolates the turntable platter from vibration, and smooths rotation, so your records sound as clear as can be, without a hint of audible wow or flutter or rumble.

Another feature we've given the L-A10—end-of-play auto return and shutoff—protects both record and stylus, and, at the same time, provides you with the convenience you deserve. You'll also find up-front controls, including cueing, that are accessible with the dust cover down. All in all, the L-A10 represents one of the best buys on the market.

JVC Turntables: Specifications

	QL-Y55F	QL-Y7	QL-Y3F
MOTOR			
Type	Coreless DC servo motor	Coreless DC servo motor	Coreless DC servo motor
Drive System	Direct-drive	Direct-drive	Direct-drive
Speed Detection System	Integrated frequency generator	Integrated frequency generator	Integrated frequency generator
Servo System	Double-Servo Quartz	Double-Servo Quartz	Double-Servo Quartz
Start-up Characteristics	1/3 rotation	1/3 rotation	1/2 rotation
Wow and Flutter	0.015% (WRMS) 0.035% (DIN) 0.009% (WRMS)*	0.015% (WRMS) 0.035% (DIN) 0.01% (WRMS)*	0.025% (WRMS) 0.04% (DIN) 0.015% (WRMS)*
Signal-to-Noise Ratio	78dB (DIN-B)	78dB (DIN-B)	78dB (DIN-B)
Start-up Torque	1.5kg · cm	1.5kg · cm	650g · cm
Speed Deviation	0.002%	0.002%	0.002%
Load Characteristics	0%	0% (under 170g loads)	0% (under 100g loads)
Drift (hour)	0.0001%/H	0.0001%/H	0.0001%/H
Thermal Drift	0.00005%/°C	0.00005%/°C	0.00005%/°C
PLATTER			
Size	308mm die-cast aluminum	322mm die-cast aluminum	310mm die-cast aluminum
Weight (mat included)	2kg	2kg	1.5kg
TOEARM			
Type	Dynamically-balanced electronic servo controlled arm	Dynamically-balanced electronic servo controlled arm	Statically-balanced electronic servo controlled arm
Effective Length	254mm	245mm	245mm
Tracking Error	-1°12' ~ +1°48'	-1°31' ~ +1°48'	-1°31' ~ +1°48'
Overhang	15mm	15mm	15mm
Applicable Tracking Force	0—3g	0—3g	0—3g (0.25g steps)
Applicable Cartridge Weight	3.5—9.5g	14.5—25g (headshell included)	14.5—19g (headshell included)
Arm Elevation Range	±3mm	±3mm	±3mm
Operation Mode	Fully automatic	Fully automatic	Fully automatic
CARTRIDGE SUPPLIED			
GENERAL			
Dimensions (W x H x D)	495 x 195 x 405mm 19-1/2 x 7-11/16 x 15-15/16 inches	480 x 177 x 436mm 18-7/8 x 7 x 17-3/16 inches	480 x 169 x 436mm 18-7/8 x 6-5/8 x 17-3/16 inches
Weight	12kg (26.4 lbs.)	13kg (28.6 lbs.)	10kg (22.1 lbs.)

* Measured by FG Method.

	L-F71	QL-F61	QL-A51
MOTOR			
Type	Coreless DC servo motor	Coreless DC servo motor	Coreless DC servo motor
Drive System	Direct-drive	Direct-drive	Direct-drive
Speed Detection System	Integrated frequency generator	Integrated frequency generator	Integrated frequency generator
Servo System	—	Double-Servo Quartz	Double-Servo Quartz
Pitch Control Range	—	±6%	±6%
Start-up Characteristics	—	1/2 rotation	1/2 rotation
Wow and Flutter	0.03% (WRMS) 0.05% (DIN) 0.015% (WRMS)*	0.025% (WRMS) 0.04% (DIN) 0.015% (WRMS)*	0.025% (WRMS) 0.04% (DIN) 0.015% (WRMS)*
Signal-to-Noise Ratio	75dB (DIN-B)	75dB (DIN-B)	75dB (DIN-B)
Speed Deviation	—	0.002%	0.002%
Load Characteristics	—	0% (under 100g loads)	0% (under 100g loads)
Drift (hour)	—	0.0001%/H	0.0001%/H
Thermal Drift	—	0.00005%/°C	0.00005%/°C
PLATTER			
Size	295mm die-cast aluminum	295mm die-cast aluminum	295mm die-cast aluminum alloy
Weight (mat included)	0.9kg	0.9kg	0.9kg
TOEARM			
Type	Statically-balanced electronic servo controlled arm	Statically-balanced arm on TH (Tracing Hold) system	Statically-balanced arm on TH (Tracing Hold) system
Effective Length	220mm	220mm	220mm
Tracking Error	-0°43' ~ +3°35'	-0°43' ~ +3°35'	-0°43' ~ +3°35'
Overhang	15mm	15mm	15mm
Applicable Tracking Force	0—3g	0—3g (0.1g steps)	0—3g (0.1g steps)
Applicable Cartridge Weight (headshell included)	8.5—12g	8.5—12g	8.5—12g
Operation Mode	Fully automatic, Music scan	Fully automatic	Auto return
CARTRIDGE SUPPLIED			
GENERAL			
Dimensions (W x H x D)	420 x 115 x 355mm 16-9/16 x 4-1/2 x 14 inches	420 x 115 x 355mm 16-9/16 x 4-1/2 x 14 inches	420 x 115 x 355mm 16-9/16 x 4-1/2 x 14 inches
Weight	6kg (13.2 lbs.)	5.5kg (12.1 lbs.)	5.3kg (11.7 lbs.)

* Measured by FG Method.

	L-F41	L-A31	L-A10
MOTOR			
Type	Coreless DC servo motor	Coreless DC servo motor	AC synchronous motor
Drive System	Direct-drive	Direct-drive	Belt-drive
Wow and Flutter	0.03% (WRMS) 0.05% (DIN)	0.03% (WRMS) 0.05% (DIN)	0.045% (WRMS) 0.075% (DIN)
Signal-to-Noise Ratio	75dB (DIN-B)	75dB (DIN-B)	66dB (DIN-B)
PLATTER			
Size	295mm die-cast aluminum	295mm die-cast aluminum alloy	300mm die-cast aluminum alloy
TOEARM			
Type	Statically-balanced arm on TH (Tracing Hold) system	Statically-balanced arm on TH (Tracing Hold) system	Statically-balanced straight arm
Effective Length	220mm	220mm	220mm
Tracking Error	-0°43' ~ +3°35'	-0°43' ~ +3°35'	-0°48' ~ +4°
Overhang	15mm	15mm	15mm
Applicable Tracking Force	0—3g (0.1g steps)	0—3g (0.1g steps)	0—3g
Applicable Cartridge Weight (headshell included)	8.5—12g	8.5—12g	8.5—11.5g
Operation Mode	Fully automatic	Auto return	Auto return
CARTRIDGE SUPPLIED			
GENERAL			
Dimensions (W x H x D)	420 x 115 x 355mm 16-9/16 x 4-1/2 x 14 inches	420 x 115 x 355mm 16-9/16 x 4-1/2 x 14 inches	420 x 115 x 350mm 16-9/16 x 4-1/2 x 14 inches
Weight	5.5kg (12.1 lbs.)	5.2kg (11.4 lbs.)	4.5kg (9.9 lbs.)

JVC Turntables: Specifications

	L-E5	L-E3	L-E600
MOTOR			
Type	Coreless DC servo motor	Coreless DC servo motor	Coreless DC servo motor
Drive System	Direct drive	Direct drive	Belt drive
Wow and Flutter	0.03% (WRMS) 0.04% (DIN) 0.015% (WRMS)*	0.03% (WRMS) 0.045% (DIN) 0.015% (WRMS)*	0.06% (WRMS) 0.08% (DIN)
Signal-to-Noise Ratio	78dB (DIN-B)	75dB (DIN-B)	60dB (DIN-B)
PLATTER			
Size	295mm die-cast aluminum	295mm die-cast aluminum	295mm die-cast aluminum
TOEARM			
Type	Linear-tracking statically-balanced straight arm	Linear-tracking statically-balanced straight arm	Linear-tracking statically-balanced straight arm
Effective Length	142mm	153mm	102mm
Tracking Error	±0°15'	±0°25'	±0°5'
Overhang	0	0	0
Applicable Tracking Force	1.5g, +0.25g -0.5g	1.75g, ±0.25g	—
Operation Mode	Fully automatic	Fully automatic	Fully automatic
CARTRIDGE SUPPLIED			
	MD-1034	MD-1044	MD-1038U
GENERAL			
Dimensions (W x H x D)	340 x 115 x 357mm 13-3/8 x 4-1/2 x 14-1/16 inches	340 x 114 x 358mm 13-3/8 x 4-1/2 x 14-1/8 inches	340 x 87 x 350mm 13-3/8 x 3-7/16 x 13-13/16 inches
Weight	5.7kg (12.5 lbs.)	5.4kg (11.9 lbs.)	4.5kg (10.0 lbs.)

* Measured by FG Method

Cartridges: Specifications

	MD-1034	MD-1038U	MD-1039E	MD-1044
Type	MM Dual Magnet Type	MM Dual Magnet Type	MM Dual Magnet Type	MM Dual Magnet Type
Frequency Response	10Hz—25kHz	10Hz—20kHz	10Hz—25kHz	10Hz—25kHz
Output Voltage	2.4mV	2.5mV	2.5mV	2.4mV
Output Balance	—	—	±1.5dB	±1.5dB
Load Impedance	47k—100k ohms	47k ohms	47k—100k ohms	47k—100k ohms
Electrical Impedance (1kHz)	4k ohms	—	2.8k ohms	3.8k ohms
Compliance (100Hz)	8 x 10 ⁻⁴ cm/dyne (dynamic)	7 x 10 ⁻⁴ cm/dyne (dynamic) 25 x 10 ⁻⁴ cm/dyne (static)	8 x 10 ⁻⁴ cm/dyne (dynamic)	8 x 10 ⁻⁴ cm/dyne (dynamic)
Replacement Stylus	DT-37	DT-38	DT-39E	DT-37
Channel Separation (1kHz)	25dB	25dB	25dB	25dB
Optimum Tracking Force	1.5g (+0.25g, -0.5g)	2.0g (±0.5g)	1.75g (±0.25g)	1.5g (+0.25g, -0.5g)
Stylus	0.6 mil Diamond	0.6 mil Diamond	Elliptical Diamond	0.6 mil Conical Diamond
Weight	—	—	7.6g	14.4g

MC Cartridges



MC-2E

"Direct-Coupling".....A JVC Original

MC-2E now features the new direct-coupling innovation. Since the coil has been successfully positioned five times closer to the stylus than more conventional designs, and because the signal picked up by the stylus doesn't have to travel the length of the cantilever, phase delays and response aberrations have been eliminated and constant high performance assured.

Specifications

Type	Moving Coil
Frequency Response	10Hz—25kHz
Output Voltage	0.2mV
Output Balance	±1dB
Load Impedance	30 ohms
Electrical Impedance (1kHz)	30 ohms
Compliance (100Hz)	8 x 10 ⁻⁴ cm/dyne (dynamic)
Replacement Stylus	—
Channel Separation (1kHz)	25dB
Optimum Tracking Force	1.5g (±0.2g)
Stylus	0.07 x 0.14 mm Elliptical Diamond
Weight	8.7g



MC-E3E

High-Output MC Cartridge

This is a replacement cartridge/ tonearm assembly for the L-E3 turntable. Its moving-coil design gives clearer sound reproduction with better defined localization of the sound image without a transformer or head amplifier because of its high output. For convenience, the stylus is replaceable.

Specifications

Type	Moving Coil
Frequency Response	10Hz—25kHz
Output Voltage	1.5mV
Output Balance	±1.5dB
Load Impedance	47k ohms
Electrical Impedance (1kHz)	135 ohms
Compliance (100Hz)	8 x 10 ⁻⁴ cm/dyne (dynamic)
Replacement Stylus	DT-E3E
Channel Separation (1kHz)	25dB
Optimum Tracking Force	1.75g (±0.25g)
Stylus	Elliptical Diamond
Weight	13.5g (Pipe arm included)

Design and specifications subject to change without notice.

JVC[®]

DISTRIBUTED BY

HIGH FIDELITY DIVISION
US JVC Corp.

41 Slater Drive, Elmwood Park, New Jersey 07407