audio/video components

product catalog

deo produc_{its}







KENWOOD

On our Web site (www.kenwoodusa.com) it's easy to find out everything you need to know about Kenwood home audio products. In the Catalog section, you'll find a complete listing of features and specifications for every unit. Head over to the "Build a Home System"

Custom-build your own home audio system on our Web site.

Section, and you'll learn about what it takes to create a great home theater--and you can build one on-screen that will fit the size of your own living room. Then you can find out where you can buy the system, and even print out a map to your local dealer!



Receivers

Kenwood components are known for delivering impressive performance and for being built to higher standards. In reviewing one of our receivers, Robert Harley said in *Stereophile Guide to Home Theater*, that it was "built with impressive quality," and noted its "hefty transformer, large custom-made filter capacitors, and a fan-cooled heat sink for the output transistors."

Dolby Digital

This new format delivers the ultimate in surround-sound fidelity, imaging, and realism. Dolby Digital sends full-range, independent sound to all five speakers, and includes a separate channel for Low Frequency Effects (bass). You'll hear incredibly vivid movie sound—the drone of alien star ships streaking overhead; the rumble of dinosaurs stampeding on the left and right; the roar of a tornado blasting right through the room.

Dolby Pro Logic

While Dolby Digital is the wave of the future, Dolby Pro Logic is now the most widely available surround-sound format on the planet. Virtually every movie made since 1977 that's on video works with Dolby Pro Logic, so there's no need to wait for the DVD or laser disc versions of a movie to get terrific surround sound.

K-STAT: Kenwood's exclusive audio-only transistor, for clearer sound

K-STAT—a patented Kenwood exclusive—is the first new transistor introduced in ten years and the only one designed specifi-

cally for audio reproduction. In all conventional transistors, temperature changes cause signal errors that create distortion. Conventional transistors have heat sensors next to them, but that's like trying to track the heat of a car's engine by putting a thermometer on the hood. These sensors can't react fast enough to correct for rapid change. But K-STAT is different—it has a heat sensor built in, which instantly detects and corrects for even small changes, virtually eliminating signal errors—and distortion.

Auto input naming and recognition: You don't have to guess what's where

Once you've connected your components to a receiver with this feature, you'll never have to remember what's connected to which input, because these receivers remember for you. They'll automatically rename the inputs according to what's connected. Cycle through, and you'll see, for example, VCR, DVD, and CD on the display—and inputs you're not using are skipped.

High-Current Power Supply

Instead of flat circuit board traces, Kenwood receivers with High-Current Power Supplies feature solid core copper wiring and raised, solid copper buss bars to move large amounts of energy quickly. So the receiver won't run out of gas during peak demands, like movies with explosions or music with heavy bass.

Switchable High-Pass and Low-Pass Filters: For stronger overall sound

If you use a subwoofer, these filters will give you far better performance from your entire system. Switch on the Speaker-Out High-Pass Filter, and the smaller left, right, center and surround speakers handle only the mids and highs that they're best at. Switch on the Subwoofer Pre-Out Low Pass Filter, and the subwoofer handles only the lows—its specialty. You'll get clearer dialog and music, cleaner, stronger bass, and an overall fullness of sound comparable to receivers costing twice as much. The result is clear, detailed sound on both music and film soundtracks.



IN-STATE (FallS1510)



It's two receivers in one: Dual-Room/Dual-Source operation lets you play different sound in two different rooms at the same time

The 1090VR feeds independent audio and video to two rooms, so you could watch a movie in Dolby Digital in one room while the kids watch TV in stereo or listen to CDs in the other.

1090VR Audio/Video Receiver

- 150 Watts per Channel in Stereo
- 150 Watts per Channel (Left/Center/Right/L-Surround/R-Surround) in Surround
- Dolby Digital Decoding*
- Full Digital Dolby Pro Logic Decoding
- FutureSet Pre-Programmed Remote
- Dual-Room/Dual-Source Operation
- Dual-Room Graphical On-Screen Operation
 - *Use with Dolby Digital laser disc player requires DEM-999D RF Demodulator. See below.

- K-STAT Discrete Audio Amplifier Circuitry
- Radio Data System (RDS)
- 3 Digital Inputs (2 Coaxial, 1 Optical)
- 5 Video Inputs, each with S-Video Connections
- Subwoofer Preout Low-Pass Filter (80 Hz, 24 dB per Octave)
- Defeatable Speaker-Out High-Pass Filter (80 Hz, 12 dB per Octave)
- Banana Plug-Compatible Speaker Connectors for all Channels

The new 1090VR Dolby Digital Home Theater Receiver

One of the most advanced receivers on the market, the 1090VR shows why we're known for putting more in our products. It features 150 watts of power in all five channels, the FutureSet remote, K-STAT Discrete Audio Amplifier Circuitry, High-Current Power Supply, Switchable High-Pass and Low-Pass Filters, Automatic Input Naming and Recognition, 12-Volt Relay Output for controlling accessories, RDS, three digital inputs, S-video inputs and outputs, and banana-compatible speaker terminals. All this in addition to Dolby Digital and Dual-Room/Dual-Source operation with individual on-screen displays.

Dual On-Screen Displays

Not only can the 1090VR send separate audio and video sources to two different rooms, it can send a different on-screen display to either room. Add another FutureSet remote and IR repeater (optional) and you can control the system from either room.

Supports remote control of accessories

Our Xantech-compatible 12 volt trigger output lets you automatically activate accessories such as motorized curtain closers, automatic light dimmers, and motorized projection screens through the receiver itself.



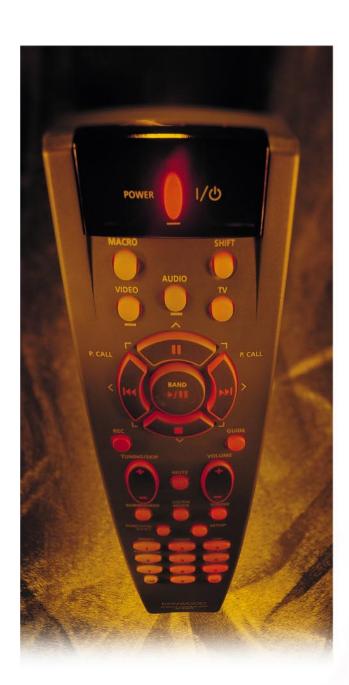
KM-X1000 Amplifier

With 130 watts of power per channel in stereo, a twospeed cooling fan, and a space-saving low profile, the KM-X1000 is the perfect amplifier to add power and fidelity to a second room fed by your 1090VR receiver.



DEM-999D RF Demodulator

- RF Demodulator for Dolby Digital Laser Disc Players
- Shielded Aluminum Construction
- Coaxial RF Input
- Coaxial Digital Output
- 12 V Power Supply Included



RC-R0905 FutureSet Remote

- Works with Kenwood 1090VR, 1080VR, 1070VR and 1060VR Receivers
- Operates Most Popular Brands of Audio and Video Source Components and Televisions
- FutureSet Upgrading Capability (via Telephone)
- Backlit Controls
- 3 Macros

FutureSet: The Last Remote You'll Ever Need

FutureSet is a real advance in convenience and performance, with unique features unavailable anywhere else:



Controls your entire system. FutureSet works with audio and video components from other manufacturers, and is the only remote that can display commands you make to separate components on-screen (or on the receiver's display)—so you never have to guess if you pushed the right button.

Codes for new components download over an ordinary phone. With FutureSet, it's easy to add control codes for components you buy in the future. Just call our toll-free number, tell the operator the component you wish to control, and hold FutureSet up to the phone. The new codes are electronically downloaded into FutureSet's memory.

Dual IR emitters. One wide-range, one long-range, so there's no need to aim FutureSet exactly at the receiver.

Three Macro buttons you can program to perform multiple functions. One button push can turn on the TV, change the input, turn on a DVD player, and start the movie.

Large, easy-to-use buttons. Buttons with different functions have different shapes to avoid confusion, and they're arranged for either left or right-handed use.

Buttons light for easy use in the dark. Touch any button and all the buttons light.

Comfortable in the hand-also stable on a flat surface. The round back fits your hand, while the four corners give solid support for tabletop use.



1080 VR Audio/Video Receiver

- 120 Watts per Channel in Stereo
- 120 Watts per Channel (Left/Center/Right),
 60 Watts per Channel (L-Surround/R-Surround) in Surround
- Dolby Digital Decoding*
- Full Digital Dolby Pro Logic Decoding
- FutureSet Pre-Programmed Remote

*Use with Dolby Digital laser disc player requires DEM-999D RF Demodulator. See page 2.

- This is the most affordable Dolby Digital receiver on the market, and a top performer. *Stereo Review* said, "The Kenwood 1080VR was a powerful, clean-sounding receiver in all operating modes. . . . Dolby Digital sound-tracks were as stupendous as always, with spectacularly wide dynamic range."
- Graphical On-Screen Operation
- K-STAT Discrete Audio Amplifier Circuitry
- 1 Coaxial and 1 TOS-link Optical Digital Input
- 4 Video Source Inputs and 3 Audio Source Inputs
- Radio Data System (RDS)
- Banana Plug-Compatible Speaker Connectors for L/C/R Channels



With a 6-channel analog input, the 1070VR is ready for you to add Dolby Digital capability whenever you like—and it features superb Dolby Pro Logic decoding that's entirely digital, for some of the most dramatic surround-sound available.

1070 VR Audio/Video Receiver

- 120 Watts per Channel in Stereo
- 120 Watts per Channel (Left/Center/Right) in Surround,
 60 Watts per Channel (L-Surround/R-Surround) in Surround
- Dolby Digital-Ready 6-Channel Analog Input
- Full Digital Dolby Pro Logic Decoding

- FutureSet Pre-Programmed Remote
- K-STAT Discrete Audio Amplifier Circuitry
- 4 Video Source Inputs and 3 Audio Source Inputs
- Banana Plug-Compatible Speaker Connectors for L/C/R Channels



1060 VR Audio/Video Receiver

- 110 Watts per Channel in Stereo
- 110 Watts per Channel (Left/Center/Right/Surround) in Surround
- Full Digital Dolby Pro Logic Decoding

If you'd rather not wait for Dolby Digital (which is now only available on DVD discs and laser discs), you can enjoy full surround-sound today from virtually any movie made since 1977 that's on video with the 1060VR's superior full digital Dolby Pro Logic decoding.

- Universal Pre-Programmed Remote
- K-STAT Discrete Audio Amplifier Circuitry
- 4 Video Source Inputs and 3 Audio Source Inputs
- Banana Plug-Compatible Speaker Connectors for L/C/R Channels

cd players cassette deck and equalizer

CD players, and Cassette Decks

We make our components easier to use with features like One-Touch CD Recording. When a Kenwood CD player and cassette deck are linked together, you only need to push one button to start recording: the components scan the CD, set the optimum recording level, start the CD playing, and begin recording.

DRIVE: Exclusive circuitry that virtually eliminates digital distortion

Changing sound into digital information breaks the curve of a sound wave into stair steps—a kind of digital distortion that's actually recorded into CDs. Kenwood's patented DRIVE circuitry is the only technology in the world that can actually restore the natural wave shape, virtually eliminating digital distortion. The result is that even the subtlest musical details are crystal clear.

Exclusive Kenwood 24-bit D/A Converter.

The 1070CD CD player incorporates our new exclusive 24-bit D/A converter. This ultra high-resolution system dramatically improves signal-to-noise performance, giving subtle musical details life-like presence, and adding a new sense of depth to music.

Precision Digital Timing to prevent jitter.

If a CD's digital information isn't read at an extremely steady rate, the signal "jitters," which makes the music come out harsh. Kenwood players have a digital clock that's completely isolated from other circuitry to keep the signal rock-steady. The result is no jitter, and music that sounds natural.



The 1070CD features Kenwood's exclusive 24-Bit D/A Converter which actually doubles low-level resolution, so you'll hear rich detail in even the quietest musical passages.

1070CD Rotary CD Player

- 5-Disc Rotary CD player with 4-Disc Play Exchange
- Exclusive Kenwood 24-Bit D/A Converter with 4th-Order Noise Shaping
- DRIVE Distortion Reduction Circuitry
- Digital Pulse Axis Control (DPAC)
- One-Touch CD Recording (CCRS) Compatible
- Coaxial and Optical (TOS-link) Digital Outputs
- Displays CD Text



With coaxial and optical digital outputs, the 1060CD is ideal for direct digital recording to mini disc recorders. And its CD text feature displays the text information present on some newer CDs.

1060CD Rotary CD Player

- 5-Disc Rotary CD player with 4-Disc Play Exchange
- DRIVE Distortion Reduction Circuitry
- Dual 1-Bit D/A Converters with 3rd-Order Noise Shaping
- Digital Pulse Axis Control (DPAC)
- One-Touch CD Recording (CCRS) Compatible
- Coaxial and TOS-link Optical Digital Outputs
- Displays CD Text



cd players cassette deck and equalizer



With DRIVE, our exclusive circuitry that virtually eliminates digital distortion, the 1050CD is one of the best values in CD players on the market.

1050CD Rotary CD Player

- 5-Disc Rotary CD player with 4-Disc Play Exchange
- DRIVE Distortion Reduction Circuitry
- Dual 1-Bit D/A Converters with 3rd-Order Noise Shaping

- Digital Pulse Axis Control (DPAC)
- One-Touch CD Recording (CCRS) Compatible



Dolby B & C Noise Reduction, Dolby HX Pro headroom extension, and Auto Bias adjustment ensure excellent recordings. And Relay Recording lets you record on to two tapes, one after the other, to capture programs up to three hours long.

1050CT Dual-Well Cassette Deck

- Full-Logic Auto Reverse Tape Transports
- Dolby HX Pro Headroom Extension
- Dolby Noise Reduction (B and C)
- Dual-Frequency Auto Bias Adjustment

- Manual Bias Fine-Tuning
- Relay Recording
- One-Touch CD Recording (CCRS)
- High-Speed Tape-to-Tape Dubbing



14 bands per channel and a parametric function give you total tone control. 30 preset listening curves make it easy to find one to compliment your room or music, and the two preset recording curves let you make tapes custom-tailored for car or portable use.

1070KE Graphic Equalizer

- 14-Band Graphic Equalizer
- Graphic/Parametric Function
- +12 dB Adjustment Range

- 30 Preset Listening EQ Curves
- 2 Preset Recording EQ Curves
- 27-Band Spectrum Analyzer Display



1050MD Mini Disc Recorder

- DRIVE Distortion Reduction Circuitry
- ATRAC ver. 4.5 Encoding
- 20-bit A/D and D/A converters
- Jog-Shuttle Control Dial
- Coaxial Digital Inputs and Outputs
- Optical (TOS-link) Digital Inputs and Outputs
- Direct Text Input using Remote
- Captures CD Text from Text-Encoded CDs

The Kenwood Mini Disc advantage

Mini Discs are the next wave in recordable audio, because the three-inch discs are easier to store than cassettes, much more durable, and the recording is perfect: it's not a copy—it's a clone. You can record up to 74 minutes of music per disc, and a Kenwood Mini Disc recorder even captures the text information on newer CDs-and shows it to you on the player's display. And like CD players, Mini Disc players offer instant track access, repeat, and scan.

A better Mini Disc recorder

Our 1050MD Mini Disc recorder incorporates the latest 4.5 ATRAC encoding for flawless transfer from CDs or analog sources, and Kenwood's exclusive DRIVE circuitry to remove digital distortion and restore the music's natural timbre. With its jog-shuttle control dial, operation is easy-you can even enter a disc or artist name directly from its remote.

Full Mini Disc Line

This year Kenwood presents a full line of Mini Disc products for home, car, and personal listening, so you can take your custom-recorded digital music anywhere.

take your music on the road



- 10 Second Digital Anti-Skip
- Microphone Input and Direct Digital Input
- Headphones and Remote Included



Portable Mini Disc Player

- 10 Second Digital Anti-Skip
- Pocket-sized
- Watch-Style LCD Remote and Headphones Included



KMD-C80

Car Audio 6-Disc Mini Disc Changer

- 10 Second Digital Anti-Skip
- Disc Naming (with Compatible Kenwood Units)
- Compact Chassis

The KR-X1000 THX Home Theater Receiver: Extraordinary THX performance

THX circuitry, developed by Lucasfilm, Ltd., to deliver the most accurate home theater experience possible, is available in other receivers—but that doesn't mean their performance matches Kenwood's. David Ranada, writing in *Stereo Review*, praised our KR-X1000: "After a spate of A/V receivers suffering from significant faults . . . it comes as an immense pleasure to find one that can be recommended essentially without reservation. . . . Used in stereo mode with music or in Dolby Pro Logic or, better, THX mode with movies, the KR-X1000 left little to be desired. It's a rare receiver that does so much so right and so well."



KR-X1000 THX Receiver

- 125 Watts per Channel in Stereo
- 130 Watts per Channel (Left/Center/Right), 80 Wattsper Channel (L-Surround/R-Surround) in Surround
- Home THX Certified
- Full Digital Dolby Pro Logic Decoding
- 5 Video Inputs, each with S-Video Connections
- Universal Pre-Programmed Remote
- Discrete Power Amplifier Circuitry



KM-X1000 THX Power Amplifier

- 130 Watts per Channel in Stereo
- 270 Watts in Mono
- Home THX Certified
- Low-Profile Design



Kenwood's THX Speakers: Vivid THX sound

Kenwood has been recognized for building clearly superior THX speakers. Writing in the *Stereophile Guide to Home Theater*, Steven Stone had this to say about our THX speakers and subwoofer: "Since introducing their first product into the U.S. market in 1961, Kenwood has built its reputation on delivering maximum bang for the buck. This THX-certified surround speaker package certainly continues this tradition . . . these speakers demonstrated excellent dynamic abilities, smooth harmonic response, excellent imaging capabilities, fine low-level detail resolution, and impressive bass response."

LS-X1F THX Front Speaker

- Home THX Certified
- 3-Way Design
- Two 5-1/4" Polypropylene Cone Woofers,
 Two 1" Soft Dome Tweeters, 3/4" Soft Dome Super Tweeter
- Time-Aligned Crossover Network
- 150 Watts Power Handling

LS-X1S THX Surround Speaker

- Home THX Certified
- 3-Way Design
- Two 5" Polypropylene Cone Woofers,
 Two 3" Cone Midranges Two 3/4" Soft Dome Tweeters
- Dipolar Radiation
- 150 Watts Power Handling

SW-X1 THX Subwoofer

- Home THX Certified
- 12" Driver with 1 mm-Thick Polypropylene-Injected Cone
- 1"-Thick Enclosure Material
- 150 Watts Power Handling

Speakers and Subwoofers

At Kenwood we put the same design expertise into our speakers that we do in our components. Kenwood engineers select the best combination of drivers, adjust the crossovers, and tune enclosures to produce full, clear, dynamic sound. Much of the technology used in our acclaimed THX-certified speakers, such as sonically matched drivers and dipolar surround speaker design, is also found in our affordable KVS line. The result is pure and natural fidelity for both music and movies.

KVS Speakers

With our KVS line, our aim was to create the best value in affordable speakers in the market. These are American designed and built 3-way and 2-way speakers with sonically matched drivers, enclosures, and voicing, so they deliver accurate, transparent sound in any combination—as a pair of stereo speakers, as sets of speakers for different rooms, or as a complete surround-sound system for movies. Whichever you choose, and however you combine them, they'll produce a sound quality that rivals much more expensive speakers.

Subwoofers that deliver better sound and more convenience

Kenwood subwoofers offer deeper, more powerful bass, better performance, and extra features clearly beyond the typical subwoofer. The narrow footprint saves space, and the full-function remote control lets you to choose your listening mode (either Music or Movies), adjust the level, even change the phase, to perfectly tailor the sound without leaving your listening position.

Sigma Servo: The tightest bass around

Because an amplifier can't keep a subwoofer from sounding muddy unless it can completely control the speaker's motion, our subwoofers feature an exclusive circuit called Sigma Servo. Inside, an extra wire goes from the subwoofer's amp to its speaker, which gives the amp the feedback it needs to damp the speaker ten times more efficiently. You can easily hear the difference. These subwoofers deliver bass that's far tighter and punchier.



KVS-400 3-Way Speakers

- 8" Woofer and 8" Bass Driver
- 4" Polypropylene Cone Midrange
- 3/4″ Tweeter
- Ported Design
- Tower Configuration
- Multi-Element Crossover Network
- Magnetically Shielded
- 5-Way Binding Post Connectors
- 140 Watts Power Handling
- Sold in Pairs



KVS-300 3-Way Speakers

- 8" Woofer
- 4" Polypropylene Cone Midrange
- 3/4" Tweeter
- Ported Design
- Tower Configuration
- Multi-Element Crossover Network
- Magnetically Shielded
- 5-Way Binding Post Connectors
- 120 Watts Power Handling
- Sold in Pairs



KVS-200 2-Way Speakers

- 6-1/2" Woofer
- 3/4" Tweeter
- Ported Design
- Multi-Element Crossover Network
- Magnetically Shielded
- 100 Watts Power Handling
- Sold in Pairs



KVS-50 Center Channel Speaker

- (2) 5" Polypropylene Cone Woofers
- 3/4" Tweeter
- Ported Design
- Multi-Element Crossover Network
- Magnetically Shielded
- Angled Side and Adjustable Leg Aim Speaker from Floor or TV Top
- 5-Way Binding Post Connectors
- 110 Watts Power Handling



KVS-60 Surround Speakers

- 5" Polypropylene Cone Woofer
- (2) 3" Midrange/Tweeters
- Dipolar Midrange/Tweeter Configuration
- Multi-Element Crossover Network
- Built-In Wall-Mount Hardware
- 50 Watts Power Handling
- Sold in Pairs



1050SW Powered Subwoofer

- 12" Polypropylene Cone Driver
- Built-In 150 Watt RMS Amplifier
- Sigma Servo
- 2 Listening Modes (Movies, Music)
- Auto Power On/Off
- Variable Crossover Frequency, Selectable Crossover Filter Slope, Switchable Phase
- Line-Level and Speaker-Level Inputs
- Motorized Volume Control
- Remote Control Included

Personal Monitors

Kenwood headphones feature super-thin diaphragms for a clear midrange, lightweight neodymium magnets that are ten times more powerful per ounce than standard ferrite magnets for excellent bass, oxygen-free copper cords to carry the strongest signal possible, and gold-plated plugs which resist the corrosion that dulls electronic connections. Our headphones are also convenient and comfortable, with features such as a built-in volume control on the cord, single-side cord entry that keeps the cord out of your way, professional offset earpiece design that puts the headband farther back on your head for a better fit, and genuine leather headbands and earcups with extra padding that keeps them comfortable even after hours of listening.

Portable Headphones

When you're away from home, our Sports and Pocket models fold for easy storage. Our Metro model offers clear sound in a lightweight style, and for the ultimate in convenience, our Micro model fits securely in each ear without a headband.



KPM-510 Personal Monitors

- 40 mm High Sensitivity Drivers
- Adjustable Padded Leather Headband and Earcup Covers
- Generous Form-Fit Padding
- Professional Offset Earpiece Design
- 10-Foot Single-Side Entry Coiled Cord with Gold-Plated Plug and Adapter



KPM-410 Personal Monitors

- 40 mm High Sensitivity Drivers
- Adjustable Padded Leather Headband and Earcup Covers
- Form-Fit Padding
- Built-In Volume Control
- 10-Foot Single-Side Entry Cord with Gold-Plated Plug and Adapter



Built-In Volume Control



KPM-310 Personal Monitors

- 40 mm High Sensitivity Drivers
- Adjustable Padded Leather Headband and Earcup Covers
- Built-In Volume Control
- 10-Foot Cord with Gold-Plated Plug and Adapter



Built-In Volume Control



KPM-210 Personal Monitors

- 34 mm High Sensitivity Drivers
- Adjustable Snap-Fit Headband
- Built-In Volume Control
- 8-Foot Cord with Gold-Plated Plug and Adapter



Built-In Volume Control



KPM-100 Pocket Headphones

- 29 mm High Sensitivity Over-Ear Drivers
- Folding Design
- Full-Size, Padded Earpieces
- 4-Foot Cord with Gold-Plated Plug



KPM-50 Sports Headphones

- 13 mm In-Ear Drivers with Lightweight Neodymium Magnets
- Folding Design
- Water Resistant
- Vertical Headband Stays Secure
- 4-Foot Oxygen-Free Copper Cord with Gold-Plated Plug
- Carrying Case Included



KPM-30 Metro Headphones

- 13 mm In-Ear Drivers with Lightweight Neodymium Magnets
- Vertical Headband Stays Secure
- 4-Foot Oxygen-Free Copper Cord with Gold-Plated Plug



KPM-10 Micro Headphones

- 13 mm In-Ear Drivers with Lightweight Neodymium Magnets
- Built-In Volume Control
- 4-Foot Oxygen-Free Copper Cord with Gold-Plated Plug
- Carrying Case Included



Built-In Volume Control

Audio/Video Receivers

Models	1090VR	1080VR	1070VR	1060VR	KR-X1000
Specifications					
Power per Channel (Watts RMS):					
Stereo (Left & Right) at 8 ohms	150 W x 2 (6 Ω),	120 W x 2,	120 W x 2,	110 W x 2,	125 W x 2 (6 Ω),
	20 Hz - 20 kHz,	20 Hz - 20 kHz,	20 Hz - 20 kHz,	20 Hz - 20 kHz,	20 Hz - 20 kHz,
	<0.03% THD	<0.06% THD	<0.06% THD	<0.06% THD	<0.08% THD
Front (Left/Center/Right) at 8 Ohms	150 W x 3 (6 Ω),	120 W x 3, 1 kHz,	120 W x 3, 1 kHz,	110 W x 3, 1 kHz,	130 W x 3 (6 Ω),
	1 kHz, <0.7% THD	<0.7% THD	<0.7% THD	<0.7% THD	1 kHz, <0.08% THD
Surround Channels at 8 Ohms	150 W x 2 (6 Ω),	60 W x 2, 1 kHz,	60 W x 2, 1 kHz,	110 W, 1 kHz,	80 W x 2 (6 Ω),
	1 kHz, <0.7% THD	<0.7% THD	<0.7% THD	<0.7% THD	1 kHz, <0.08% THD
Frequency Response:					
Line (CD)	5 Hz ~ 85 kHz ±0.5, -3 dB	5 Hz ~ 85 kHz ±0.5, –3 dB	5 Hz ~ 85 kHz ±0.5, -3 dB	5 Hz ~ 85 kHz ±0.5, -3 dB	5 Hz ~ 100 kHz +0, -3 dB
Phono (MM)	20 Hz ~ 20 kHz, ±0.5 dB	20 Hz ~ 20 kHz, ±0.6 dB	20 Hz ~ 20 kHz, ±0.6 dB	20 Hz ~ 20 kHz, ±0.6 dB	20 Hz ~ 20 kHz ±0.3 dB
Signal-to-Noise Ratio:					
Line (CD)	97 dB	95 dB	95 dB	95 dB	96 dB
Phono (MM)	77 dB	75 dB	75 dB	75 dB	76 dB
Speaker Out High-Pass Filter	80 Hz, 12 dB/octave	80 Hz, 12 dB/octave	100 Hz, 12 dB/octave	100 Hz, 12 dB/octave	80 Hz, 12 dB/octave
Subwoofer Preout Low-Pass Filter	80 Hz, 24 dB/octave	80 Hz, 12 dB/octave	100 Hz, 12 dB/octave	100 Hz, 12 dB/octave	80 Hz, 24 dB/octave
Tone Control Characteristics:					
Bass	±10 dB (at 100 Hz)	±8 dB (at 100 Hz)	±8 dB (at 100 Hz)	±8 dB (at 100 Hz)	±8 dB (at 100 Hz)
Treble	±10 dB (at 10 kHz)	±8 dB (at 10 kHz)	±8 dB (at 10 kHz)	±8 dB (at 10 kHz)	±8 dB (at 10 kHz)
Input Sensitivity/Impedance:			25 22 (27 75 78 29	25 22 (27 72 73 74	20 22 (21 10 1112)
Line (CD)	200 mV/47 kΩ	200 mV/47 kΩ	200 mV/47 kΩ	200 mV/47 kΩ	200 mV/47 kΩ
Phono (MM)	2.5 mV/47 kΩ	2.5 mV/47 kΩ	2.5 mV/47 kΩ	2.5 mV/47 kΩ	2.5 mV/47 kΩ
Adapter In	2.0 1117/17 102	400 mV/10 kΩ	400 mV/10 kΩ	400 mV/10 kΩ	2.0
Output Level/Impedance:		100 1117/10 122	100 1117/10 1022	100 1117/10 1022	
Pre Outs	1 V/1.2 kΩ	1 V/600 Ω	1 V/600 Ω	1 V/600 Ω	940 mV/500 Ω
The Outs	1 V/ 1.2 K22	(Sub: 1 V/1 kΩ)	(Sub: 1 V/1 kΩ)	(Sub: 1 V/1 kΩ)	740 11177 300 22
Tape Rec Out	200 mV/470 Ω	200 mV/470 Ω	200 mV/1 kΩ	200 mV/1 kΩ	200 mV/330 Ω
Adapter Out		200 mV/1 kΩ	200 mV/1 kΩ	200 mV/1 kΩ	
FM Useable Sensitivity (Mono, 75 Ω)	15.2 dBf	15.2 dBf	15.2 dBf	15.2 dBf	13.2 dBf
	(1.6 μV at 75 Ω)	(1.6 μV at 75 Ω)	(1.6 μV at 75 Ω)	(1.6 μV at 75 Ω)	(1.2 μV at 75 Ω)
FM 50 dB Quieting Sensitivity (Stereo, 75 Ω):	44.2 dBf	44.2 dBf	44.2 dBf	44.2 dBf	41.2 dBf
	(31.6 μV at 75 Ω)	(31.6 μV at 75 Ω)	(31.6 μV at 75 Ω)	(31.6 μV at 75 Ω)	(32 μV at 75 Ω)
FM THD (1 kHz):					
Mono	0.2%	0.2%	0.2%	0.2%	0.6%
Stereo	0.5%	0.5%	0.5%	0.5%	0.7%
FM Signal-to-Noise Ratio (65 dBf, 75 kHz dev, 1 kHz):					
Mono	75 dB	75 dB	75 dB	75 dB	75 dB
Stereo	68 dB	68 dB	68 dB	68 dB	68 dB
FM Stereo Separation (1 kHz)	40 dB	40 dB	40 dB	40 dB	40 dB
FM Selectivity (±400 kHz)	70 dB	70 dB	70 dB	70 dB	50 dB
FM Frequency Response (+0.5 dB, -3.0 dB)	30 Hz ~ 15 kHz	30 Hz ~ 15 kHz	30 Hz ~ 15 kHz	30 Hz ~ 15 kHz	30 Hz ~ 15 kHz
AM Useable Sensitivity	16 μV (600 μV/m)	16 μV (600 μV/m)	16 μV (600 μV/m)	16 μV (600 μV/m)	12 μV (500 μV/m)
AM signal-to-Noise Ratio (30% mod., 1 mV input)	48 dB	48 dB	48 dB	48 dB	48 dB
Power Consumption	4A	2.9 A	2.9 A	2.5 A	6.5A
Dimensions (H x W x D)	5 ¹¹ / ₁₆ " x 17 ⁵ / ₁₆ " x 13 ³ / ₄ "	51/8" x 175/16" x 135/8"	51/8" x 175/16" x 135/8"	51/8" x 175/16" x 135/8"	65/8" x 175/16" x 1613/16
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Audio/Video Receivers (continued)

Models	1090VR	1080VR	1070VR	1060VR	KR-X1000
Features					
Dolby Digital Decoding	•	•	6-Channel Analog Input		
Dolby Pro Logic Decoding	Digital	Digital	Digital	Digital	Digital
Dolby 3 Stereo	Digital	Digital	Digital	Digital	Digital
Home THX Cinema Mode					•
(Re-Equalization, Decorrellation, Timbre Matching)					
Audio DSP Modes	Arena, Jazz Club,	Arena, Jazz Club,	Arena, Jazz Club,	Arena, Jazz Club,	DSP Logic w/Simulated
	Stadium, Church,	Stadium, Church,	Stadium	Stadium	Stereo Surrounds
	Theater	Theater			
K-STAT Discrete Audio Amplifier Circuitry	•	•	•	•	
Dual-Room/Dual Source Operation	•				
Memorized Play Buttons (Macros)	•	•	•	•	
Graphical On-Screen Operation	Dual-Room	•			
FutureSet Pre-Programmed Remote with	•	•	•		
Backlighting and One-Call Upgrading					
Universal Pre-Programmed Remote				•	•
Direct Component Control (via Remote)	•	•	•	•	
IR Receiver Input, IR Repeater Output,	•				
12 V Relay Output (Xantech-Compatible)					
Digital Inputs (Coaxial/Optical)	2/1	1/1			
Rear-Panel Video Inputs (Composite)	4	3	3	3	5
Rear-Panel Video Record Outputs (Composite)	2	1	1	1	2
Rear-Panel Video Monitor Outputs (Composite)	1	1	1	1	1
Front-Panel AV/Aux Input	•	•	•	•	•
S-Video Connections for All Video Inputs and Outputs	•				•
Speaker Connectors	Banana-Compatible	Banana-Compatible	Banana-Compatible	Banana-Compatible	Banana-Compatible
		L/C/R	L/C/R	L/C/R	
Audio Inputs	4	3	3	3	5
Preouts	L/C/R/LS/RS/SW	C/LS/RS/SW	C/LS/RS/SW	C/S/SW	L/C/R/LS/RS/SW
Main Amp Inputs					L/C/R/S/LS/RS
Adapter Loop		•	•	•	
Subwoofer Level Adjustment (via Remote)	•	•	•	•	•
Radio Data System (RDS)	•	•			
Switched AC Accessory Outlets	2	2	2	2	2

CD Players

Models	1070CD	1060CD	1050CD	
Specifications				
Frequency Response (±0.5 dB)	4 Hz ~ 20 kHz	4 Hz ~ 20 kHz	4 Hz ~ 20 kHz	
Signal-to-Noise Ratio	110 dB	100 dB	95 dB	
Dynamic Range	100 dB	95 dB	95 dB	
Total Harmonic Distortion				
(THD+N at 1 kHz)	0.003%	0.005%	0.008%	
Output Level/Impedance	2 V (max)/300 Ω	2 V (max)/300 Ω	2 V (max)/800 Ω	
Power Consumption	14 W	14 W	13 W	
Dimensions (H x W x D)	4 15/16" x 17 5/16"	4 15/16" x 17 5/16"	4 ¹⁵ /16" x 17 ⁵ /16"	
	x 155⁄8"	x 155/8"	x 155/8"	
Weight	11 lb	11 lb	11 lb	
 Features				
24-Bit D/A Converter	•			
DRIVE Distortion Reduction	•	•	•	
Noise Shaping	4th-Order	3rd-Order	3rd-Order	
Oversampling	32 fs	8 fs	8 fs	
DPAC Precision Digital Timing	•	•	•	
One-Touch Recording (CCRS) Compatible	•	•	•	
Random Play with Lockout	•	•	•	
32-Track Programming	•	•	•	
Direct Track Access (via Remote)	•	•	•	
CD Text Display	•	•		
Coaxial Digital Output	•	•		
TOS-link Optical Digital Output	•	•		
Variable Headphone and Line Output	From Remote	From Remote	From Remote	
Full-Function Remote	•	•	•	

Cassette Deck

Model	1050CT
Specifications	
Frequency Response (±3 dB):	
Type I Tape	30 Hz ~ 18 kHz
Type II Tape	30 Hz ~ 19 kHz
Signal-to-Noise Ratio (3% 3rd HD, Type II Tape):	
Dolby NR Off	59 dB
Dolby B NR	68 dB
Dolby C NR	75 dB
Wow & Flutter (WRMS)	<0.1%
Input Sensitivity/Impedance	122.8 mV/47 kΩ
Output Level/Impedance:	
Line Out	775 mV/1.0 kΩ
Headphone Out	0.5 mW/32 Ω
Power Consumption	30 W
Dimensions (H x W x D)	5 ¹ / ₄ " x 17 ⁵ / ₁₆ " x 14 ⁷ / ₁₆ "
Weight	10.1 lb
 Features	
Full-Logic Electronic Tape Transports	•
Dual Auto-Reverse Mechanisms	•
Dolby B and C Noise Reduction	•
Dolby HX Pro Headroom Extension	•
Dual Frequency Auto Bias Adjustment	•
Manual Bias Fine-Tuning	•
Dual Well Recording	•
Relay Recording	•
Relay Play	•
One-Touch CD Record (CCRS)	•
High-Speed Tape-to-Tape Dubbing	•
Direct Program Search System:	
16-Track Song Search	•
Track Repeat	•
Rewind Play	•
Zero Stop	•

speaker specs

Speakers

Models	KVS-400	KVS-300	KVS-200	KVS-50	KVS-60
Specifications					
Speaker Type	Main	Main	Main	Center	Surround
Woofer	8"	8"	61/2"	5" (2)	5"
Bass Driver	8"				
Midrange	4"	4"			3" Midrange/Tweeters (2)
Tweeter	3/4"	3/4"	3/4"	3/4"	
Enclosure Type	Ported	Ported	Ported	Acoustic Suspension	Acoustic Suspension/ Dipolar
Power Handling	140 Watts	120 Watts	100 Watts	110 Watts	50 Watts
Frequency Response	40 Hz ~ 20 kHz	45 Hz ~ 20 kHz	55 Hz ~ 20 kHz	80 Hz ~ 20 kHz	100 Hz ~ 20 kHz
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Dimensions (H x W x D)	38" x 11"	35 ⁷ /16" x 11"	175/8" x 811/16"	7" x 20" x 6 ³ / ₈ "	10⁵⁄8" x 8"
	x 111/8"	x 11½"	x 8 ³ / ₄ "	(including leg bracket)	x 5 ¹ / ₂ "
Weight	35 lb	30 lb	14 lb	11 lb	8 lb
Features					
Magnetically-Shielded	•	•	•	•	
Wall-Mount Hardware Included					•
Enclosure Finish	Black	Black	Black	Black	White
Models	LS-X1F	LS-X1S	SW-X1	1050SW	
Specifications	20 ///	20 /110	311 AI	10,0011	
Speaker Type	Front	Surround	Subwoofer	Powered Subwoofer	
Woofer	51/4" (2)	5" (2)	12"	12"	
Midrange		3" (2)			
Tweeter	1" (2)	3/4" (2)			
Super Tweeter	3/4"				
Enclosure Type	Acoustic Suspension	Acoustic Suspension	Ported	Ported	
Power Handling	150 Watts	150 Watts	150 Watts		
Power Output				150 Watts RMS	
Frequency Response	80 Hz~ 20 kHz	150 Hz ~ 20 kHz	20 Hz ~ 5 kHz		
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms		
Dimensions (H x W x D)	77/s" x 87/s"	12" x 9%16"	191/4" x 191/4"	21 ¹¹ /16" x 14 ⁵ /16"	
	x 10 ³ / ₈ "	x 5"	x 20 ¹ / ₁₆ "	x 20 ¹ / ₄ "	
Weight	18.7 lb	12.8 lb	57.2 lb	52.8 lb	
-					
Features			_		
THX Certified	•	•	•		
Sigma Servo				•	
Magnetically-Shielded	•		•		
Wall-Mount Hardware Included	81.1	• AM-14 -	D/ ·	D' '	
Enclosure Finish	Black	White	Black	Black	

Here at Kenwood, we sometimes worry that explaining why our products deliver such great sound may get too technical. After all, you just want to enjoy movies and music, not build the stuff that plays them. That's our job.

Let's face it. There's no substitute for great technology.

But any company can say they build better products—whether they do or not. At Kenwood, we do. This year alone we invented and patented the world's only audio-only transistor, an exclusive new 24-bit digital-to-analog converter in our CD players, and built what we think is the best remote control on the market. We also added dozens of features that make our products sound better, work better, and make them easier to use.

By learning just a little about the technology behind these features, you'll see why Kenwood products have earned a reputation for delivering the best performance in their class.

Genuine Kenwood Do the music justice.

To find your local Kenwood dealer, call 1-800-KENWOOD. Or for all the latest information on every Kenwood product (and some fun stuff, too) check out our web site on the Internet at www.kenwoodusa.com.

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