Kenwood Audio Components 000 1998 technology for Living KENWOOD





The PowerPad remote

Included with Kenwood VR-2090 and VR-2080 receivers





She picks up the PowerPad. "What's this?"

I smile. "Play with it and you'll find out."

I look over her shoulder. She moves the joystick, finding the menu that controls the 200-disc CD changer. On PowerPad's screen, a choice of CDs by name appears . . . "Kind of Blue" by Miles Davis; "Tuesday Night Music Club," by Sheryl Crow, and "Mozart Sonatas," played by Murray Perahia.

"Click down to play what you want," I say. She clicks on Mozart, then keeps scrolling.

"Wow," she says. "How many CDs are in this thing?"

"It holds 200. I've got it about half full."

As the sound of a Steinway fills the room, she finds more menus. She increases the treble, adds concert hall presence, and boosts the subwoofer.

"I put all that in a macro for you," I say. "Next time, just go to the macro screen and pick the first one."

"Pretty impressive," she says. "I thought custom remotes were really expensive."

"It's not custom. It's Kenwood."

"Really? My dad had a Kenwood. Sounded great for 20 years. He wouldn't let me touch it, though."

"Probably a good idea," I deadpan. She gives me a look for that.

"Surround-sound for movies?" she asks.

"And music. DTS® Multi-Channel Music, to get technical. You just passed an Eagles disc remixed for 5.1 channels. Sounds like you're standing on stage."

Suddenly, she discovers something new among the menus. "What's this? You've got a DVD player?"

Before I can answer she pushes another macro. Mozart stops. The TV screen lights up, and my Kenwood DVD player puts Arnold on the screen, filling bad guys with lead. In Dolby® Digital surround-sound, the bullets ricochet around the room.

"So this is what you watch when I'm not around. And I thought you were the sensitive type."

"Man cannot live by costume dramas alone," I comment.

She gives me a look for that, too.

It's rare when **Something comes** along that makes you realize what is possible

Imagine controlling every aspect of your system in a way that isn't just easy, but is also fun. That's the beauty of PowerPad, the remote that comes with our new receivers. Instead of buttons, you select from menus on a palm-sized screen. Use the thumb-sized joystick to move from item to item, or to a new menu. When you find what you want, simply click down on the joystick.

The sound you will unleash will put you in another world. You may be surrounded by stampeding dinosaurs or the warm acoustics of a jazz club. The startling realism derives from separate Dolby Digital and DTS processors, which offer vivid multi-channel sound. The bass seems to emanate from the center of the earth, thanks to a hefty power supply and oversized capacitors. Midrange and highs feel like a breath of fresh air, a benefit of Kenwood's exclusive K-STAT, the only transistor in the world that virtually eliminates distortion due to temperature changes.

Along with superior sound comes luxurious features. Put a DVD, standard CD, or DTS multi-channel music CD in your DVD player

without worrying about setting your receiver's listening mode. Your Kenwood will sense the disc's digital format and make the adjustments.

We have also solved another problem: once your entire CD collection is in a high-capacity CD changer, what if two people want to hear something different in different rooms? The answer is Kenwood's CD-2280M, a 200-disc CD changer that can play two discs at once.

And we have created a DVD player prepared for the future, with the ability to play the brandnew ultra-high resolution audio-only discs and the forthcoming DTS Digital Surround DVDs.

With features this advanced, we probably could have ignored styling. Yet by the clean lines, uncluttered front panels, and distinctive platinum finish, you can see we didn't.

In sum, our goal is to present to you an extraordinary entertainment experience, as superior technology does its job quietly in the background.

We call it technology for living.



By its look alone, you'll notice that a Kenwood receiver stands out. While your first impression may be that it is beautiful, its true beauty is its superior sound and intelligent functionality.

Consider the remote control. PowerPad's lit LCD screen presents you with menus that offer an extraordinary range of control over your entire system. You can activate your VCR, choose to play a CD, or begin a DVD movie by selecting pictured items instead of pressing obscure button combinations. Page through the menus, and you will find it just as easy to use the custom sound options, from bass management to speaker delay. With PowerPad and the reproduction offered by both Dolby Digital and DTS multi-channel sound formats, achieving a truly stunning sonic environment is easier than it's ever been.

When you want to be entertained, we don't think you should worry about what format your entertainment is in. So a Kenwood receiver knows whether it's receiving a DTS, Dolby Digital, or standard CD digital signal from a digital component, and adjusts itself accordingly. Choose to play a non-digital component, such as your VCR, and your receiver switches to the last listening mode you chose for that input. We also don't think you should have to manually repeat your standard operations, so our receivers allow you to program several into a single button push.

THE VR-2080: OUR NEW STANDARD FOR A SINGLE-SOURCE RECEIVER

With all the features described above, as well as five independent channels with 100 watts each, 20-bit resolution digital-to-

analog converters by Crystal Semiconductor, Kenwood's exclusive K-STAT temperature-adjusting audio transistors, a full array of inputs and outputs, and even the ability to operate remote-controlled lighting systems or motorized drapes, the VR-2080 could easily be our flagship model. But then we thought of the possibilities of a receiver like this that would include dual room, dual source operation—and the VR-2090 was born.

THE VR-2090: THE LUXURY OF DUAL ROOM, DUAL SOURCE CAPABILITY WITH FEATURES PERFECT FOR CUSTOM INSTALLATION

The VR-2090 adds dual room, dual source audio/video capability to what we've already accomplished with the VR-2080. It enables you to provide different entertainment in two different rooms without buying a whole new set of components for your second room. Imagine entertaining your guests with Mozart in the living room while the children watch a movie in stereo in the family room—both with the same exquisite sound quality.

To make it as flexible as possible, we even included the capability to control home automation systems that respond to a 12-volt relay. Because the VR-2090 includes a 12-volt relay output, it can trigger an independent system which may close your drapes, dim your lights, and lower your screen. And you can activate it directly from your PowerPad.

As you can see, the gorgeous exterior of a Kenwood receiver is only the outward indication of our true goal, which is to deliver more than you expect.

Real-time component status display

2-Way IR communication lets PowerPad show you the status of your receiver and any Kenwood component with our SL16 connection. Change the subwoofer level, adjust the treble, or set a Kenwood CD player to random, and you'll see your changes right on PowerPad's screen.



Second Room Preouts

The VR-2090 can send separate audio and video signals to a second room. Enjoy a DVD movie in your main room while your receiver sends audio and video from your VCR to a TV and a pair of speakers in the second room for the kids. Or you can use the Second Room Preout to send audio to another receiver for full Dolby Pro Logic surround sound.



DTS and Dolby Digital Surround Sound

Play films recorded in any surround sound soundtrack format: DTS, Dolby Digital, or Dolby Pro Logic. 24-bit decoder circuitry provides the highest audio resolution currently available. The VR-2090 will even display text information broadcast by participating RDS radio stations on its front panel display.





VR-2090



High-capacity CD changers for one room or two

In addition to its distinctive look, you'll notice something different about a Kenwood high-capacity CD changer the first time you use it. In a word, it is convenience. Because just storing 200 discs in a changer doesn't automatically make them easily accessible, we've included features that will make managing your CD collection a pleasure.

To begin with, you can change out any or all of the other discs while one is playing, so you can enjoy music as you organize your discs. If you have a CD that contains CD text information, our changers store it in memory and display it when the disc is played. For other CDs there is ample memory for naming discs and tracks yourself. Twenty-six musical genres are provided for you to categorize your discs. Then, if you'd like to hear just classical for the evening, you can instruct your Kenwood changer to play from just that genre—even to randomly select tracks from a single genre, if you like.

When you combine a Kenwood changer with other Kenwood components, convenience multiplies. Play a disc, and a Kenwood receiver will automatically switch to the appropriate input and listening mode. And, most remarkably, when discs and tracks are named, all the information can be downloaded and stored inside the PowerPad's memory. When you want to play a CD, you can scroll through your entire collection right on PowerPad's screen, and simply pick the one you want.



Along with all this convenience comes our attention to fidelity. Kenwood changers feature dual Sigma-Delta digital-to-analog converters, 8-times oversampling, 3rd-order noise shaping, and our exclusive DPAC (Digital Pulse Axis Control) precision digital timing for clean, clear sound. Our changers are also DTS compatible. With DTS multi-channel music, you can hear a jazz combo or Chicago blues band captured in three dimensions, with the instruments clearly spread out before you while the complex harmonics of reflected sound blend to completely surround you.

THE CD-2260M: A PERFECT MATCH TO OUR VR-2080 RECEIVER

As mentioned above, the benefits of pairing a Kenwood changer and receiver together are clear. For single-room entertainment, the CD-2260M will provide you with all the sound quality and convenience features you need.

THE CD-2280M: FOR DUAL-ROOM USE, A CHANGER THAT CAN PLAY TWO DISCS AT ONCE

To complement our dual-source, dual-room receiver, we took the logical (and unique) step of inventing a dual-room, dual-source CD changer. The CD-2280M has two entirely separate disc transport mechanisms, allowing it to play two separate discs at the same time. In other words, the CD-2280M is essentially two changers in one. During single-room use, the dual transports work together, one playing the current CD as the other loads the next selection. The result is virtually no pause in the music.



Dual Disc Transports

The CD-2280M has two independent disc transports, A and B, which can be used to play different discs at the same time for two different rooms or can be used together for seamless play without a time lag between tracks or discs—perfect for dual room installations with our VR-2090 receiver.



DTS-Compatible

These 200 disc changers will play the latest DTS Multi-Channel Music CDs, which creates a listening experience rivaled only by live performance itself.



a DVD player built for the future





Because the world of electronic entertainment changes so rapidly, we have gone to extra efforts to ensure that you'll not only enjoy your Kenwood DVD player now, but for years to come.

For example, you can enjoy DTS multi-channel CDs today. And when DVD movies encoded in DTS surround-sound become available, you'll be able to play them on your Kenwood. Our DVD player is also compatible with ultra-high sampling rates used in audio-only DVDs—all the way up to 96kHz—made possible by our 24-bit audio digital-to-analog converters. Of course, this circuitry also provides stunning performance by rendering movie soundtracks with impressive clarity. And so that quiet passages remain absolutely silent, we have designed a discrete power supply to keep noise out of the analog circuitry.

We have also pushed the picture quality into the future with innovative circuitry that eliminates the capacitors which can cause color and phase problems. The result is rich solid colors, deep blacks, and a crispness of detail that brings everything into sharp, realistic focus. There is also a precision to the image, with edges rendered more clearly, owing to our 10-bit video digital-to-analog converter, a significant improvement over first generation 8-bit converters.

As soon as you activate the smooth-moving motorized front-panel door, you will sense the build-quality of this product. You will notice that the on-screen display presents a neat and efficient toolbar at the top of your picture. Using our advanced joystick remote, you'll find you can make your adjustments without missing the movie. Of course, if you use a Kenwood receiver as the centerpiece of your entertainment system, you can see your DVD controls on the screen of your PowerPad remote.

With all these features, as well as eight levels of parental control, multiple dialog language function, and CD Text, we have aimed to create a DVD player that we—and you—can be proud of now and far into the future.



VR-2090 VR-2080

PC	M/FR	$P \Delta^{-}$	Γ INI	なり

POWER RATINGS		
Stereo Power	100 Watts per Channel (Left/Right,	100 Watts per Channel (Left/Right,
	20Hz - 20kHz, 0.03% THD, 6 ohms)	20Hz - 20kHz, 0.03% THD, 6 ohms)
Surround Power (Front Channels)	100 Watts per Channel (Left/Center/Right,	100 Watts per Channel (Left/Center/Right
	1kHz, 0.09% THD, 6 ohms)	1kHz, 0.09% THD, 6 ohms)
Surround Power	100 Watts per Channel	100 Watts per Channel
(Surround Channels)	(LSurround/RSurround,	(LSurround/RSurround,
	1kHz, 0.09% THD, 6 ohms)	1kHz, 0.09% THD, 6 ohms)
Dynamic Power (per Channel,	140 Watts / 160 Watts /	140 Watts / 160 Watts /
Left and Right, 8/6/4/2 ohms)	200 Watts / 225 Watts	200 Watts / 225 Watts
TUNER SPECIFICATIONS		
FM Useable Sensitivity (Mono, 75 ohm	s) 1.6μV/15.2dBf	1.6μV/15.2dBf
FM 50dB Quieting Sensitivity (75 ohms	s) 31.6µV/41.2dBf (Stereo)	31.6µV/41.2dBf (Stereo)
FM THD (1kHz, 65dBf Input)	0.3% (Mono), 0.6% (Stereo)	0.3% (Mono), 0.6% (Stereo)
FM Selectivity (+/- 400kHz)	70dB	70dB
FM Signal-to-Noise Ratio	75dB (Mono), 68dB (Stereo)	75dB (Mono), 68dB (Stereo)
(1kHz, 65dBf Input)		
FM Stereo Separation (1kHz)	38dB	38dB
AM Useable Sensitivity	16μV	16μV
(Mono, 75 ohms)		
AUDIO SPECIFICATIONS		
Signal-to-Noise Ratio	77dB (Phono), 90dB (CD, Tape)	77dB (Phono), 90dB (CD, Tape)
Input Sensitivity	2.5mV (Phono), 200mV (CD, Tape)	2.5mV (Phono), 200mV (CD, Tape)
Input Impedance	27kOhm (Phono), 47kOhm (CD, Tape)	27kOhm (Phono), 47kOhm (CD, Tape)
Output Level	200mV (Tape Rec), 1V (Preouts)	200mV (Tape Rec), 1V (Preouts)
Output Impedance	1kOhm	1kOhm
Tone Control Characteristics	+/-8dB at 100Hz (Bass),	+/-8dB at 100Hz (Bass),
	+/-8dB at 10kHz (Treble)	+/-8dB at 10kHz (Treble)
PRODUCT DIMENSIONS AND WEI	GHT	
Width	17-5/16"	17-5/16"
Height	6-3/8"	6-3/8"
Depth	15-3/8"	15-3/8"
777 · .1 .	00 7 11	0.4 77 11

26.5 lb



Weight



24.7 lb

Easy speaker set-up

CD PLAYER PERFORMANCE SPECIFICATIONS

	CD-2280M	CD-2260M
AUDIO SPECIFICATIONS		
Frequency Response	4Hz - 20kHz (+/- 0.5dB)	4Hz - 20kHz (+/- 0.5dB)
Total Harmonic Distortion	0.005% (1kHz)	0.005% (1kHz)
Signal-to-Noise Ratio	97dB	97dB
Dynamic Range	94dB	94dB
Channel Separation	92dB (1kHz)	92dB (1kHz)
Output Level	2.0V	2.0V
Output Impedance	0.9kOhm	0.9kOhm
PRODUCT DIMENSIONS AND W	EIGHT	
Width	17-5/16"	17-5/16"
Height	6-15/16"	6-15/16"
Depth	18-7/8"	18-7/8"
Weight	19.8 lb	17.4 lb

DVD PLAYER PERFORMANCE SPECIFICATIONS

DΙ	1_2	በ7በ

AUDIO SPECIFICATIONS		
Frequency Response		
44.1kHz Sampling Frequency:	4Hz - 20kHz	
48kHz Sampling Frequency:	4Hz - 22kHz	
96kHz Sampling Frequency:	4Hz - 44kHz	
Total Harmonic Distortion	0.003% (1kHz)	
Signal-to-Noise Ratio	114dB	
Dynamic Range	97dB	
Channel Separation	90dB (1kHz)	
Analog Output Level	1.2V	
Analog Output Impedance	0.34kOhms	
VIDEO SPECIFICATIONS		
Horizontal Resolution	500 Lines	
Video Signal-to-Noise Ratio	60dB	
PRODUCT DIMENSIONS AND WEIG	НТ	
Width	17-5/16"	
Height	5-1/16'	
Depth	15-1/8"	
Weight	12.8 lb	



Select CDs and songs by title



Control source components

