

KENWOOD

The facts on Kenwood's latest product

NEW FEATURES

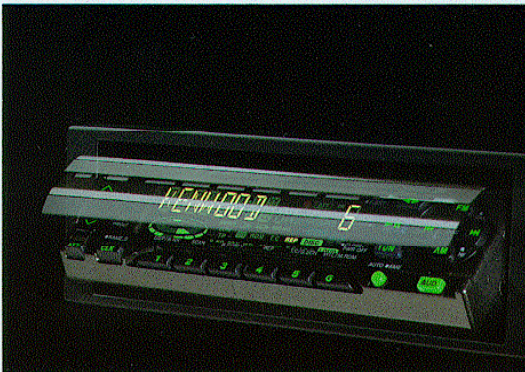


NEW POWER



NEW STYLE

MASK (new SRM) for protection and wide color display / System E's (switchable preout and high pass filter) / High voltage preout (4V) / D.R.I.V.E. technology / New 10-disc and 6-disc changer / Steering wheel mounted remote control (KCA-R7) / Pearl mica cone diaphragms / Double magnet / Dual mags / PPTA film tweeters / New power supply / Sigma drive servo system / Optional new color variation for TDF





CD Receiver and Cassette Receiver



MASK (New Stealth Retraction Mechanism)

MASK (new SRM) control panel interlocked with ignition key

Kenwood's MASK, new Stealth Retraction Mechanism features new safety and security improvements such as open/close operation of the panel interlocked with the ignition key. Simply by turning the car

ignition key on, the hidden control panel rotates into view automatically. Turn the key off and the panel swings out of sight. (You no longer need to remember to remove the front panel when leaving the car.)



Ignition key [ON]



Ignition key [OFF]



Ignition key [OFF]



Ignition key [OFF]

Multi-Color LCD - a total joy to operate

The large Multi-Color LCD is now a standard feature on many of our new CD / cassette receivers. The perfect companion for your high-quality audio environment, the Multi-Color LCD with its interactive design provides an "at-a-glance" grasp of audio information including listening source and playback status thanks to easy-to-read indicators.



Green key illumination



Amber key illumination

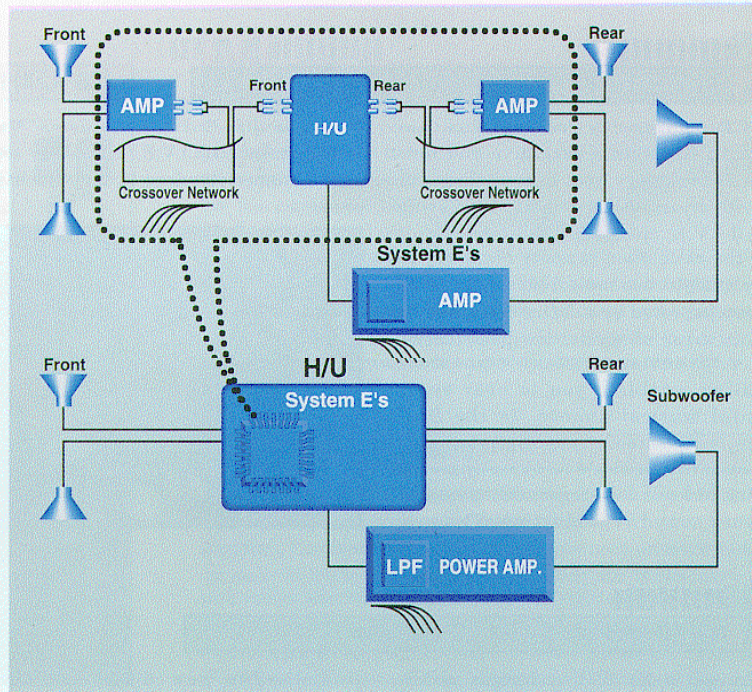
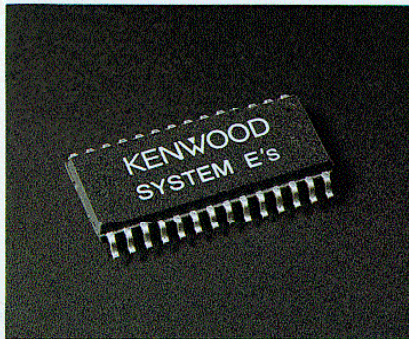
One-touch sliding panel for easy CD and tape handling

For easier loading and removal of CD and cassettes, the front panel can be flipped down with a touch of a button. Simply press the eject button, and the front panel slides down to reveal the cassette or CD insertion slot for easy loading and ejection remove.



System E's (Switchable preout & high-pass filter)

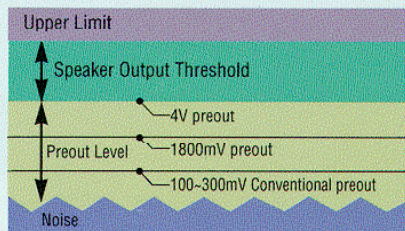
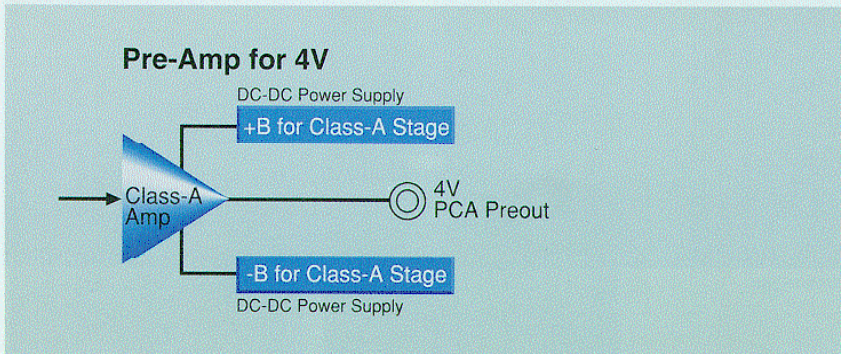
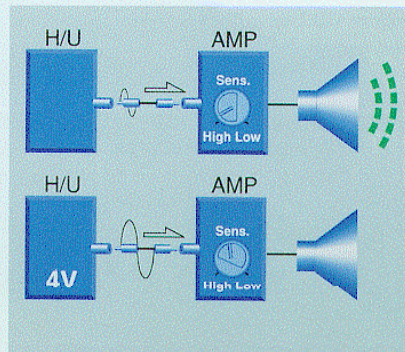
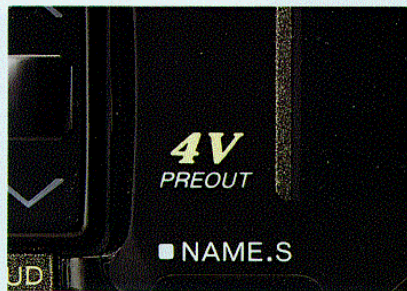
Subwoofer connection and operation is made easy and convenient thanks to the newly developed SystemE's IC. The front preout can be switched to non-fading output by using the front panel controls while front/rear independent high-pass filter switches allow versatile speaker selection for front and rear channels. An additional volume control function is also provided for non-fader preout volume adjustment.



High-voltage preout (4V) and high output power (35W x 4)

Kenwood's new CD/Cassette Receivers have extra-powerful built-in power amps. With max. output power of $35W \times 4$, this 4-channel power amp circuitry can drive the four speakers at 35 watts each, for full dynamic reproduction of any music source including Compact Discs and Mini Discs with wider frequency response and without any distortion. The preout level is raised to 4-Volts, providing extra resistance to induced noise during signal transmission while the amplifier gain is effectively controlled to drive the speakers with an improved signal-to-noise ratio and dynamic range. This results

in extreme clarity and high signal to noise ratio especially when reproducing very faint music signals.



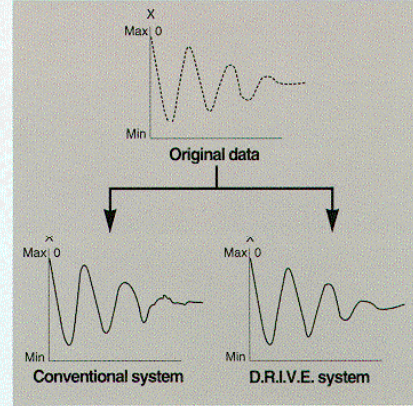
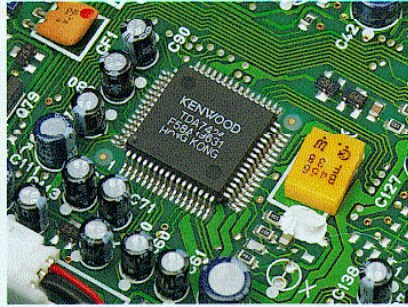


CD Changer

D.R.I.V.E. circuit

D.R.I.V.E. sound quality clarity is better than ever. With Kenwood's exclusive and new D.R.I.V.E. technology, your compact discs will play with crystal-clear fidelity. By moving the D.R.I.V.E. circuit to the system front stage, the calculation capacity necessary to remove quantization noise from small signals has been improved by a factor of 8. Also by using an array of special low-pass filters, D.R.I.V.E. achieves 20-bit equivalent resolution, enabling you to hear every beautiful musical nuance. In the DAC section, a bit-stream type digital-analog converter raises the oversampling rate resulting in lower high-region distortion and smoother sound reproduction. The new

Dynamic Resolution Intensive Vector Enhancement (D.R.I.V.E.) technology creates even a higher standard in high fidelity CD sound.



New 10-disc and 6-disc CD changer

In addition to our 10-disc changer models, the 1997 Kenwood lineup includes the newly developed 6-disc CD changers that are more compact in size, and more convenient to

install. The new 6-disc CD changer mechanism feature smooth and quick operation for disc play and exchange, yet rigid construction assures extra durability

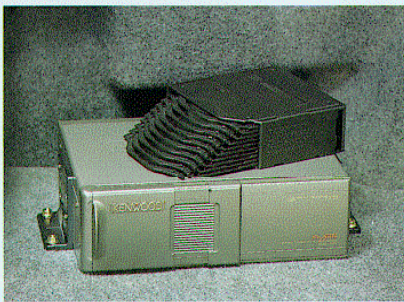
for severe road conditions. Not only horizontal and vertical, but also 45° angled mounting is possible to respond to a broader range of installation requirements.



10-disc changer



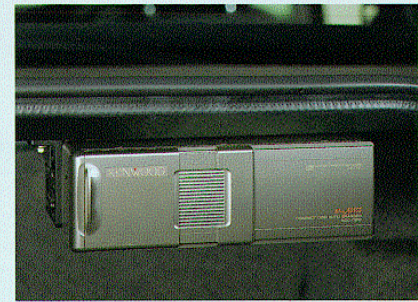
6-disc changer



■ On trunk floor



■ On trunk floor



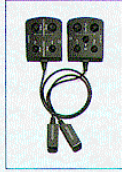
■ Under top panel of trunk



Security for theft

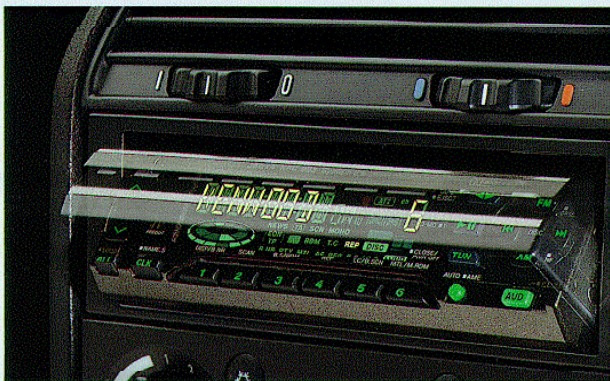
Steering wheel mounted remote control (KCA-R7)

Kenwood's "steering wheel"-mounted remote control puts the operation of all major functions at your fingertips while letting you keep both hands on the steering wheel. Your right hand controls play/stop, volume up/down, mute, and mode switching. Your left hand controls FF/REW (disc up/down) and tuner functions. What could be easier?



MASK (new SRM) with code security

MASK, the new Stealth Retraction Mechanism is Kenwood's innovative theft prevention system. When activated, the front control panel is retracted into the chassis, making it appear as if no audio system has been installed. Open/close operation is smooth and automatic when you switch the ignition on and off. There's no longer a need to remove the panel and take it with you when you leave your car. Furthermore, the special code number security provides you with extra protection against potential thieves.



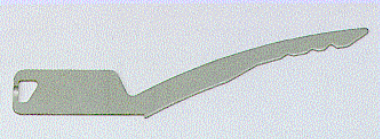
OPEN



CLOSE

MASK removal tool

Theft prevention is even more effective thanks to a new type of SRM release tool that comes with 1997 head units equipped with the new Stealth Retraction Mechanism. Using the specially made SRM release tool is easy. Just insert it between the main chassis and the sleeve. As shown in the diagram below, its unique shape means that no one can release the panel lock to remove the SRM control panel from your head unit chassis without this tool.



Tailor fit for all cars

All of Kenwood's '97 CD/Cassette Receiver models can be installed in virtually any car regardless of make or model. Whether you own an American, European or Japanese car, our new head units are designed to optimally fit the console slot of your car. Each unit comes fully equipped with various attachment accessories as well as an assortment of convenient mounting holes in the chassis, facilitating an unlimited combination of mounting possibilities, one of which will make a perfect fit for your car. (For owners of Japanese cars, an exclusive Trim Plate that enhances both fit and appearance is available as an option (separate purchase required).)

Extra-large, multi-color LCD

For improved visibility even under high speed driving conditions, our control display units feature a bigger, multi-color LCD window. The extra-large display and improved readability of data in color provide full recognition at a glance, without taking your concentration away from the road. Control key illumination on the front panel can also be switched between green and amber depending on your car's interior or your preference.

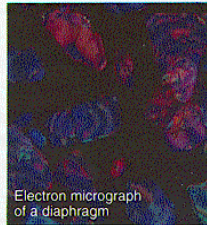


4 EVOLUTION

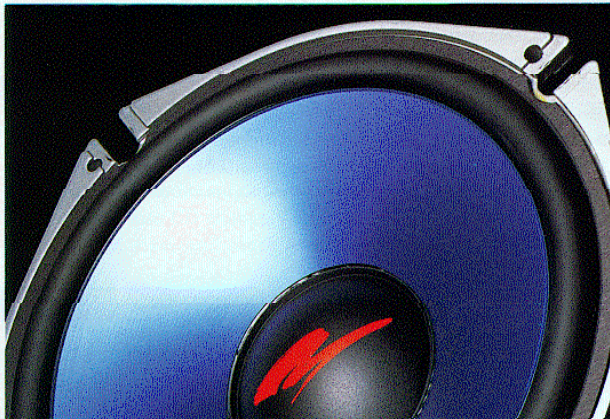
Component Speaker

P Pearl-Mica cone diaphragms

For greater dynamism and depth in the low-frequency range where the heart of all music beats, Kenwood uses a mica cone diaphragm coated with titanium dioxide (TiO₂), the ideal material for the woofer cone diaphragms. Mica provides a uniquely balanced combination of elasticity and vibration absorption characteristics that exceed those of any conventional speaker material. The titanium dioxide coating on the mica surface effectively maintains these contradictory properties. At the same time, the titanium dioxide film generates the color caused by light interference, making possible vividly colored diaphragms that have never been seen before. The Pearl-Mica Cone diaphragm delivers a new dimension of enjoyment and sets a new standard for selection of component speakers.



Electron micrograph of a diaphragm



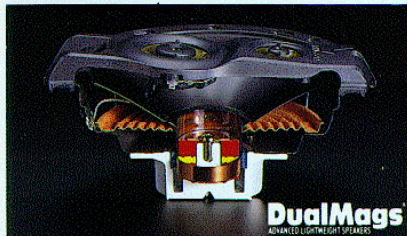
D Double Magnet subwoofer (KFC-WS302/WS202)

Temperature change and limited cone movement can handicap subwoofer performance. The Double Magnet design of KFC-WS302 and KFC-WS202 is the answer to both of these problems. It not only improves high-power input capability but also extends the range of cone movement range while improving resistance to temperature change. Higher magnetic flux density, a critical factor in driving the sub-woofer in the small closed environment of your car, is also improved by the double-magnet structure.

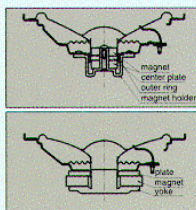


D DualMags

Kenwood's new KFC-HQR series speakers feature an advanced magnetic circuit, using a center plate sandwiched between the opposing N poles of two magnets. This creates a magnetic circuit with vertical symmetry and high flux density emitted from the center plate. The result is clearer sound for you with minimized distortion.

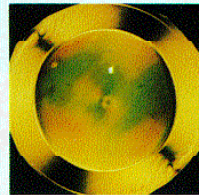


DualMags
ADVANCED LIGHTNING STRAP

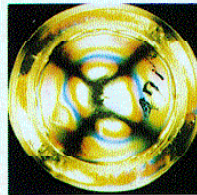


P PTA film tweeters

The most obvious advantage of the PPTA (poly para-phenylene terephthalamide) diaphragm in a car environment is its outstanding weather resistance and heat-resistance dimensional stability. Sound quality is another benefit, thanks to its high internal loss and higher propagation speed. This is particularly important for high-frequency sound, which is why PPTA is an excellent choice for tweeter diaphragm construction.



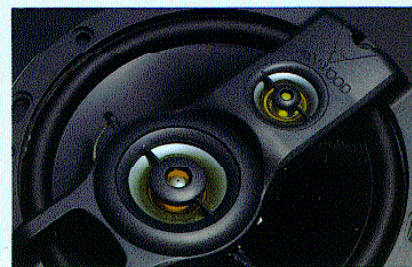
Smooth response of PPTA diaphragm revealed by laser interferometry



PI diaphragm response as shown by laser interferometry

B Bridged design

In the structure of a standard coaxial speaker, the tweeter and midrange speaker are mounted on the pillar that rises from the center of the woofer. This support prevents a cone cap from being fitted over the chamber, which means the woofer cannot be correctly tuned to suppress the high frequencies that interfere with the tweeter. Mounting the tweeter and midrange units on a bridge across the top of the woofer allows the woofer cone cap to be fitted, leading to stabilized midrange sound image localization and crisp highs. The bridges were made as small as possible to avoid being affected by vibrations from the woofer.

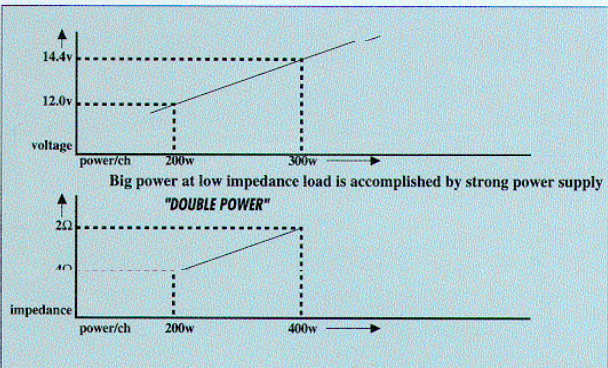
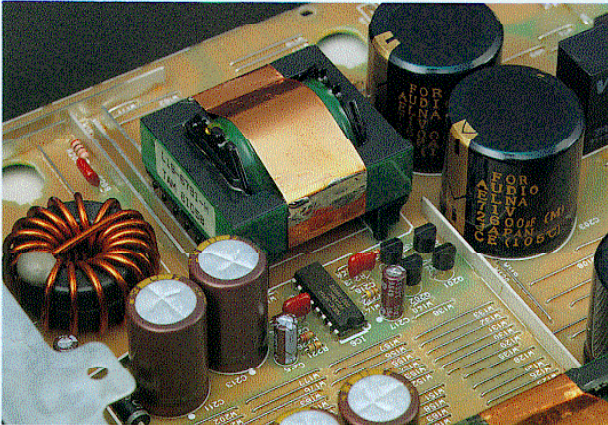




Power Amplifier

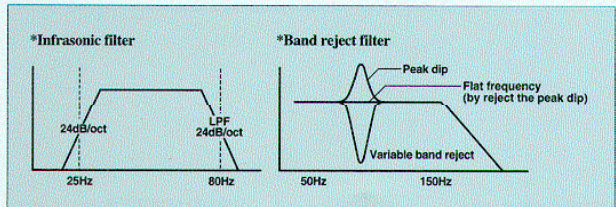
New flexible power supply

New PS series amplifiers can provide high power at high voltage or low power at low voltage. The brawny power supply uses large capacitors and other superior components to deliver high power at high voltage loads. Heat radiation and mutual interference have also been reduced by the employment of independent power sources for the final and driver section. What does all this mean for you the listener? Stable high-quality sound from your amplifier circuitry regardless of power and voltage output.



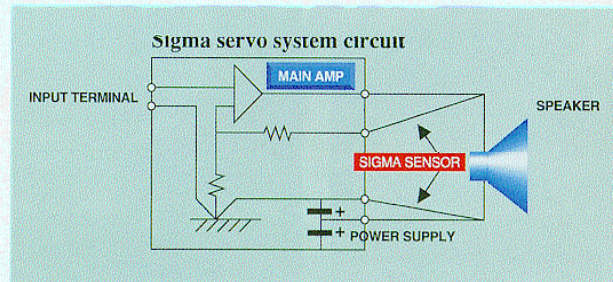
Special filters for subwoofer control

The use of a high-power amp to drive the subwoofer may result in peaks and dips in the lower frequencies. That means deterioration of sound quality. The variable band reject filter (BRF) reduces those peaks and dips and prevents the adverse influence of standing waves. And to make sure that only required range of low-frequency signals drive the subwoofer, a combination of low-pass and infrasonic filters with a steep cut-off of 24dB/oct. are used. Special filter technology is just a part of the technology that goes into the best tuning subwoofer control system anywhere.



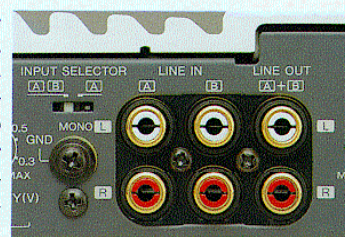
Sigma Servo System (KAC-PS400M)

First introduced for home audio components in 1980, the epoch-making technology of Kenwood's Sigma Drive amplifier is now incorporated in our car audio systems. The unique 4-line connection between the amp and speakers enables control of power, distortion and the damping factor by the amplifier. With the Kenwood 4-line Sigma Drive Servo System, speakers are directly driven by the amplifier, resulting in a huge reduction in distortion from speaker load and more faithful reproduction of your music. It also delivers improved dynamic low frequency response with solid bass and noise-free, razor-sharp sound imaging. This system is the perfect answer for the control of outboard subwoofers.

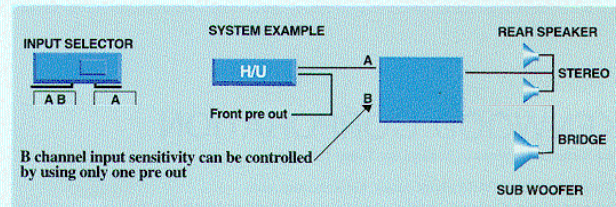


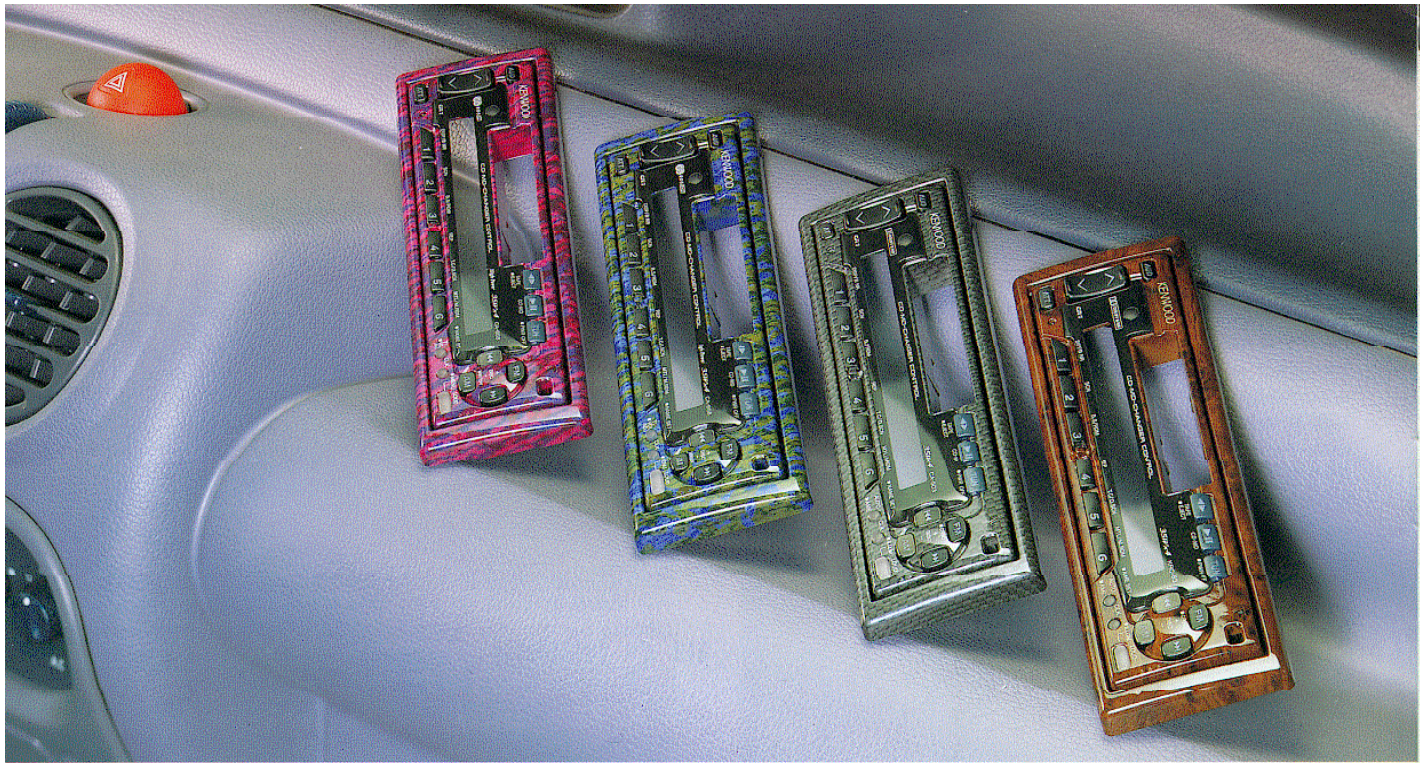
Convenient 3-channel operation

Connection with single-preout head units is easy, thanks to the A+B/A channel input selector. The dual-stereo amplifier design also lets you drive a pair of rear or front speakers and a powerful subwoofer with a single outboard amplifier.



Equipped with independent input sensitivity, KAC-646X lets you make fine adjustments and enjoy well-balanced amplification





■ Bonus for TDF head unit owners

Replacement of the original front panel face with a color face is exclusively available to owners of head unit. (Replacement must be performed at an authorized Kenwood dealer.) Choose the color that best matches your car interior from among the following finishes:



■ Mineral purple mica finish



■ Ebony finish



■ Woodgrain finish



■ Landscape green finish



■ Space blue finish



■ Lagoon green finish



■ Carbon finish

The sales models of color panels are different in different countries or areas. Please contact your local shop for details.

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Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice.

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