Future Directions in Home Entertainment

Audio/Video Products
2007-2008
At Onkyo, we’re on a mission to show the A/V industry what high-definition home entertainment is really all about. To get the most out of your movies, music, gaming and broadcasting, we blend the best new technologies with renowned Onkyo build quality and audio expertise. The result is an emotive performance from A/V products that remain intuitive and easy to use.

Leading our new A/V receiver range is the impressive home-network entertainment centre, the TX-NR905. Backing it up, with the most advanced A/V processing available, are the high-end TX-SR875 and TX-SR805. In the popular mid-range category, the TX-SR705 and TX-SR605 are two highly capable receivers to anchor your high-definition movies and music. And rounding out a stellar A/V receiver line-up are our affordable entry-level models, the TX-SR505E and HT-R508.

You are also invited to view the full suite of Onkyo components, such as our quality-focused playback components (p. 13), our speaker systems (p. 20) and our complete range of audiophile hi-fi components (pp. 15-19). As well, you can peruse our superb collection of CD receiver systems (pp. 21-23), along with our home-style components/accessories (pp. 24-26).
High-Definition Multimedia Interface (HDMI) for Pure Digital Delivery

All the Onkyo A/V receivers released in 2007 incorporate HDMI, enabling a pure, all-digital 1080p video signal to be sent through with selected HDMI 1.3a-compliant components. HDMI supports a variety of high-definition video formats (see XT or 2EQ ranges). HDMI 1.3a will also bring you greater bandwidth, Deep-Color™-type correction and high frame rates.

HQV Reon-VX Chip for High-Performance Video Processing

Representing the most sophisticated video processing to be seen in home theatre components, the HQV Reon-VX chip provides the ultimate support for standard definition and high-definition deinterlacing: 1080p reconstruction of film sources filtering of jaggies and artifacts and the reduction of random,”mosquito” and block (codec) noise. HQV Reon-VX also enables colour region enhancement and the rendering of more than one billion colours.

1080p Video Upscaling and Analogue Signal Upconversion

The TX-NR905, TX-SR705 and TX-SR805 upconvert the resolution of video signals all the way to 1080p to enable a single HDMI cable connection to an HDMI display. Almost all Onkyo A/V receivers will upconvert video signals for output via either HDMI or component video.

Audyssey Technologies for Room Acoustics Correction

Audyssey technologies ensure a perfect soundstage. Our high-end receivers use Audyssey’s HDS™ XT or 3Q™ to counter Jaggies visible on diagonals. DCDi eliminates jaggies.

Highly Precise Onboard Digital-to-Analogue Converters

Onkyo’s High-CR Current Power Supply (HCRPS) concept is based around power transformers with the capability to respond to the wide dynamics of home theatre. In the case of the TX-NR905, a massive toroidal transformer provides efficiency and radiates less noise into the surrounding circuitry, while two separate transformers cater specifically to audio and video processing. You’ll also find two quality capacitors (operating up to 18,000 microfarads) that store the charge demanded from an effective power supply.

Faroudja DCDi Edge™ (Directional Correlational Deinterlacing) Technology

Faroudja’s DCDi Edge™ technology converts interlaced video signals to progressively scan video signals. This technology helps effectively eliminate video artifacts from HDTV images.

Bi-Amping and BTL (Bridged Transless) Connectivity

Like top-quality amplifiers in the high-end audio world, selected Onkyo A/V receivers have bi-amping and BTL capabilities. Whether it’s home theatre or music, you have the luxury of a number of different home theatre set-ups beyond the standard surround sound configurations.

Networking for Streaming Audio Files and Internet Radio

The TX-NR905’s network gives you access to digital music files (AAC, VMA, WMA, MP3, WAV) via an Ethernet network between the TX-NR905 and your computer or through a front-panel USB port. At the heart of the network is Microsoft PlaysForSure certified). For internet radio you can access stations that use MP3 or WMA streaming. The TX-NR905 network also enables installation configuration and set-up of Crestron and AMX controllers with your home theatre system or network.

RI (Remote Interactive) System Capability and the iPod

With Onkyo’s RI system, you can integrate and operate all components through a single remote control. RI also enables you to integrate virtually any iPod model with one of Onkyo’s RI Dodios for the iPod.
**TX-NR905**

- THX Ultra2™ Certified 7.1-Channel A/V Home Network Receiver

Meet the standout leader of Onkyo’s new range of home theatre heroes. Embrazing all of the technologies synonymous with the 2007 line-up—
including HDMI 1.3a, Dolby® TrueHD, DTS-HD® Master Audio, THX Ultra2 and Audyssey MultEQ® XT—the TX-NR905 7.1-channel home network receiver has a number of advantages that propel it into the home theatre super league. Look to the TX-NR905’s network (interfacing with Windows Media Player and Windows Media Connect) to open up a huge reservoir of internet and computer-based audio resources. And enjoy the edge in high-definition 1080p video processing from the world’s first receiver to incorporate HQV Reon-VX. In line with Onkyo’s impeccable track record, under the hood of the TX-NR905 you’ll find an innovative power supply, remarkable amplification design, and high-performance parts from the likes of Texas Instruments. “Complete” is a tag not given lightly, but the TX-NR905 earns it in style.

- 220 W/Ch. Continuous 4 L, 1 kHz, 1 Channel Driven, IEC
- THX® Ultra2™ Certified with THX Processing
- Networking Capability for Streaming Internet Audio and Playing Video Content (via Ethernet and USB Port) (Microsoft
  Registered Trademark Certified)
- HDMI 1.3a Audio and Video Processing (4 Inputs and 2 Outputs)
- Burr Brown 192 kHz/24-Bit Audio DACs (PCM1796) for All Channels
- VLSC (Vector Linear Shaping Circuitry) for All Channels
- Three TI (Aurus) 32-Bit DSP Chips for Advanced Processing
- HDTV-Capable (100 MHz) Component Video Switching
- HDTV-Capable HDMI Switching
- Three TI (Aurus) 32-Bit DSP Chips for Advanced Processing
- Dual Push-Pull Amplifier Design with 3-Stage Inverted Darlington Circuitry
- Neural-THX® XT to Correct Room Acoustic Problems and to Calibrate Speakers
- Audyssey MultEQ® XT for Computer and Home theatre
- Bi-Amping and BTL (Bridged Transistor) Capability
- Audyssey MultEQ® XT to Correct Room Acoustic Problems and to Calibrate Speakers
- Neural-THX® Surround Technology for Gaming, Movies, and Broadcasting
- Powered Zone 2 (Audio and Video); Zone 2 and Zone 3 Pre Outs; Independent Control for Volume, Balance (Zone 2 and
  Zone 3 Only)
- Three TI (Aurus) 32-Bit DSP Chips for Advanced Processing
- Bi-Amping and BTL (Bridged Transistor) Capability
- Audyssey MultEQ® XT to Correct Room Acoustic Problems and to Calibrate Speakers
- Neural-THX® Surround Technology for Gaming, Movies, and Broadcasting

**TX-SR875**

- THX Ultra2™ Certified 7.1-Channel A/V Surround Home Theatre Receiver

Performing beyond the highest expectations, the TX-SR875 A/V surround home theatre receiver deserves all the accolades it gets. The foundations of the TX-SR875 are its isolated power amplifier block and preprocessor, which support a dual push-pull amplification design. In the engine room, you’ll find a blend of onboard technologies to drive your home entertainment effortlessly into the high-definition realm. This home-entertainment-equipped Onkyo receiver can take up to four components with 1080p video and master-quality audio. Even if your input device lacks HDMI, HQV Reon-VX will upscale the resolution of any video signal to 1080p. THX Audyssey and Texas Instruments lend the very best of their expertise to round out this high-quality package.

- 220 W/Ch. Continuous 4 L, 1 kHz, 1 Channel Driven, IEC
- THX® Ultra2™ Certified with THX Processing
- Outputs: 10 Analog, 8 Digital
- Dual Push-Pull Amplifier Design with 3-Stage Inverted Darlington Circuitry
- Bi-Amping and BTL (Bridged Transistor) Capability
- Audyssey MultEQ® XT to Correct Room Acoustic Problems and to Calibrate Speakers
- Neural-THX® Surround Technology for Gaming, Movies, and Broadcasting
- Bi-Amping and BTL (Bridged Transistor) Capability
- Colour-Coded 7.1-Multichannel Inputs and Pre Outs
- Independent Crossover Adjustment for F/C/S/SB (40/50/60/70/80/90/100/120/150/200 Hz)
- RS232, IR and 12V Trigger Connectivity
- Full-Colour Display Panel
- Bi-Amping and BTL (Bridged Transistor) Capability
- Colour-Coded 7.1-Multichannel Inputs and Pre Outs
- Independent Crossover Adjustment for F/C/S/SB (40/50/60/70/80/90/100/120/150/200 Hz)
- Customised Gold-Plated Speaker Posts
- Compatible with RS (Remote Interactive) Docks for the iPod
- Proprietary RI (Remote Interactive) Learning Remote Control with Macros and Module LEDS

[September Issue 2007]
The TX-SR805 provides a reference point for a new generation of high-definition AV receivers.

- DTS-HD
- TrueHD and DTS-HD
- Digital Plus Decoding
- XT technology for room calibration, and advanced processing devices from Texas Instruments and Cirrus Logic—nothing has been sacrificed in the making of this remarkable home theatre component.

In terms of the evolution of home entertainment, recent years have seen a quantum leap. It’s a formidable progression when you think of 1080p high-definition video and broadcasts, studio-quality lossless surround sound, and spectacular gaming with stunning motion and graphics. Bundling all this potential, the TX-SR805 A/V surround home theatre receiver has been built to provide comprehensive control over all your movies, music, broadcasts and gaming. But that barely begins to describe the TX-SR805’s potential. Augmented by its THX Ultra2 certification, this receiver goes even further by bringing you sophisticated room correction technology, multi-zone capabilities, powerful bi-amping and “push-pull” amplification. The TX-SR805 goes even further by featuring not only the lossless audio codecs, Dolby® TrueHD and DTS-HD® Master Audio, but also the most advanced version of HDMI. And with a wealth of other class-leading features—1080p video processing, Audyssey’s MultiEQ® XT technology for room calibration, and advanced processing devices from Texas Instruments and Cirrus Logic—nothing has been sacrificed in the making of this remarkable home theatre component.

• 1080i/HDMI Continuously & 48i (1 kHz) 1 Channel Drive, IC
• THX Ultra2 Certified (with THX Processing)
• DTS-HD® Master Audio, DTS-HD® High-Resolution Audio, Dolby® TrueHD, Dolby® Digital Plus Decoding
• 8-CF (high Current Power Supply) Massive High Power Transformer
• Burr-Brown 192 kHz/24-Bit Audio DAC (PCM1796) for All Channels
• RS232, IR and 12V Trigger Connectivity
• Onkyo RIHD (Remote Interactive Over HDMI) for System Control
• Pure Audio Mode
• IntelliVolume
• Bi-Amping Capability for Music and Movie Sound Effects
• Optimum Gain Volume Circuitry

The TX-SR705 breaks new ground in the mid-range category by featuring not only the lossless audio codecs, Dolby® TrueHD and DTS-HD® Master Audio, but also the most advanced version of HDMI. And with a wealth of other class-leading features—1080p video processing, Audyssey’s MultiEQ® XT technology for room calibration, and advanced processing devices from Texas Instruments and Cirrus Logic—nothing has been sacrificed in the making of this remarkable home theatre component.

• 1080i/HDMI Continuously & 48i (1 kHz) 1 Channel Drive, IC
• THX Select2” Certified (with THX Processing)
• DTS-HD® Master Audio, DTS-HD® High-Resolution Audio, Dolby® TrueHD, Dolby® Digital Plus Decoding
• H.C.P. S. (High Current Power Supply) Massive High Power Transformer
• Burr-Brown 192 kHz/24-Bit Audio DACs for All Channels
• RS232, IR and 12V Trigger Connectivity
• Onkyo RIHD (Remote Interactive Over HDMI) for System Control
• Pure Audio Mode
• IntelliVolume
• Bi-Amping Capability for Music and Movie Sound Effects
• Optimum Gain Volume Circuitry

You’ll be hard-pressed to find a mid-range home theatre A/V receiver that packs the TX-SR805’s amplification power and audio processing capabilities. It might be comforting to look to its THX Select2 certification for confirmation, but as the THX engineers have seen, there’s a lot more here than just efficient amplifier drive ability and all-round home theatre performance. The TX-SR705 breaks new ground in the mid-range category by featuring not only the lossless audio codecs, Dolby® TrueHD and DTS-HD® Master Audio, but also the most advanced version of HDMI. And with a wealth of other class-leading features—1080p video processing, Audyssey’s MultiEQ® XT technology for room calibration, and advanced processing devices from Texas Instruments and Cirrus Logic—nothing has been sacrificed in the making of this remarkable home theatre component.

In terms of the evolution of home entertainment, recent years have seen a quantum leap. It’s a formidable progression when you think of 1080p high-definition video and broadcasts, studio-quality lossless surround sound, and spectacular gaming with stunning motion and graphics. Bundling all this potential, the TX-SR805 A/V surround home theatre receiver has been built to provide comprehensive control over all your movies, music, broadcasts and gaming. But that barely begins to describe the TX-SR805’s potential. Augmented by its THX Ultra2 certification, this receiver goes even further by bringing you sophisticated room correction technology, multi-zone capabilities, powerful bi-amping and “push-pull” amplification. The TX-SR805 goes even further by featuring not only the lossless audio codecs, Dolby® TrueHD and DTS-HD® Master Audio, but also the most advanced version of HDMI. And with a wealth of other class-leading features—1080p video processing, Audyssey’s MultiEQ® XT technology for room calibration, and advanced processing devices from Texas Instruments and Cirrus Logic—nothing has been sacrificed in the making of this remarkable home theatre component.
TX-SR605 7.1-Channel AV Surround Home Theatre Receiver

- HDMI/WD, Continuous 6.1 (64-bit) 1 Channel Drives, 8C
- DTS-HD Master Audio, Dolby Digital Plus, Pro Logic II
- Audyssey DSX™ Digital Logo
- Dolby® TrueHD, Dolby® Digital EX, Dolby® Pro Logic IIx
- 192 kHz/24-Bit DACs for All Channels
- HDMI Pas-Through (18Gbps) compatible with 2 Inputs and 1 Output*)
- Audyssey 2EQ™ to Correct Room Acoustic Problems and to Calibrate Speakers
- 4 Digital Inputs (2 Optical and 2 Coaxial)
- 5 Inputs/Outputs and 2 Outputs
- CinemaFILTER™
- Pure Audio Mode
- Colour-Coded 7.1-Multichannel Inputs (Receive 7.1 Surround Sound from Compatible Blu-ray Disc and HD DVD Players)
- Subwoofer Pre-Out
- A-Form Listening Mode Memory
- Optimum Gain Volume Circuitry
- Subwoofer Pre-Out
- CinemaFILTER™
- Tone Control (Bass/Treble) for Front L/R Channels
- Crossover Adjustment at 40/50/60/80/100/120/150/200 Hz
- Colour-Coded 5.1-Multichannel Inputs (Receive 5.1 Surround Sound from Compatible Blu-ray Disc and HD DVD Players)
- Optimum Gain Volume Circuitry
- A-Form Listening Mode Memory
- Subwoofer Pre-Out
- CinemaFILTER™
- Tone Control (Bass/Treble) for Front L/R Channels
- Crossover Adjustment at 40/50/60/80/100/120/150/200 Hz
- Colour-Coded Dual Banana Plug-Compatible Speaker Posts (Except Speaker B)
- Optimum Gain Volume Circuitry
- A-Form Listening Mode Memory
- Subwoofer Pre-Out
- Speaker A/B Drive
- T one Control (Bass/Treble) for Front L/R Channels
- Non-Scaling Configuration
- Optimum Gain Volume Circuitry
- A-Form Listening Mode Memory
- Subwoofer Pre-Out
- Speaker A/B Drive
- T one Control (Bass/Treble) for Front L/R Channels
- Non-Scaling Configuration
- Optimum Gain Volume Circuitry
- A-Form Listening Mode Memory

This impressive new mid-range A/V receiver was built specifically to embrace high-definition media such as Blu-ray Disc and HD DVD. The TX-SR605 embodies a new generation, and boasts excellent signal-processing capabilities, courtesy of HDMI. With the ability to keep everything in the digital domain, the TX-SR605 provides complete control of every video and audio format available today. Adding high-definition A/V processing to Onkyo’s renowned approach to sound gives this A/V receiver a distinct advantage in the home. Offering the latest in usability and versatility—such as multi-room playback, a full connectivity suite (with switching and upconversion), room calibration and integrated system control—the TX-SR605 is poised to set new performance benchmarks in affordable home theatre.
In this age of high-definition media, you want to be fully prepared for the stunning visual quality of HD displays. You also want to be fully prepared for any computer-based audio and video files that you wish to play back with the enhanced experience offered by a home theatre system. Look no further. The DV-SP405 provides an affordable solution for playback of today’s video and audio media. What’s more, it delivers video sources through one convenient HDMI connection and matches the signal resolution to your HD display.

HDMI Technology (High-Definition Multimedia Interface) Provides the Ultimate AV Connection

When you choose to build a new home theatre system, transitions can happen so fast that you risk either spending too much for a component that does far too little. The DV-SP305 is the perfect affordable solution for playback of today’s video and audio media. You wish to play back with the enhanced experience offered by a home theatre system. Look no further. The DV-SP405 provides an affordable solution for playback of today’s video and audio media. What’s more, it delivers video sources through one convenient HDMI connection and matches the signal resolution to your HD display.
VL Digital—A Quest for the Perfect Digital Sound

The Difference Between Analogue and Digital Amplifiers

Understanding the amplification process helps to explain the difference between analogue and digital amplifiers. In an analogue amplifier, the analogue input signal is amplified without any modification. In a digital amplifier, the analogue input signal is converted into a pulse (digital) signal and then converted back into an analogue signal using a low-pass filter. An analogue signal is constantly changing within a range extending from zero to a maximum value. However, a digital signal is comprised of "pulses"—a series of zeros and ones. This significant difference between analogue and digital amplifiers is the basic principle used for amplification.

In an amplifier, the power supply circuitry (actually the capacitors) collects electricity. A transistor (valve) opens when an input signal is received, causing some of the collected energy to flow out through the output (vols). This process simply defines how amplification works. Analogue amplifier signals continuously change; the transistor must adjust the size of the "valve" to match the constantly changing input signal. On the other hand, with a digital amplifier, the signal consists of either a pulse (1) or no pulse (0)—there are no intermediate values. The "switches" in a digital amplifier are completely open (switch is on) when there is a pulse or completely closed (switch is off) when there is no pulse.

Why the Interest in Digital Amplifiers?

First of all, we should consider an analogue amplifier, where the signal always lies between zero and a maximum value. Therefore, the amplifier elements function as variable resistors that adjust the amount of electricity supplied by the power supply to match the input level. Electricity does not flow through when the elements are closed, overall. For this reason, Analogue amplifiers can only achieve a maximum power efficiency (relative to the power supply) of about 70%. This large amount of energy means that a substantial amount of heat is generated.

In a digital amplifier, the signal level is either 0 or 1, and the amplifier elements function as switches with two states: ON and OFF. The amount of power loss is very small. Consequently digital amplifiers typically have very high efficiency—90% or so. Very little energy is generated, so heat-dissipating parts such as heat sinks can be smaller and the amplifiers can be more compact.

Possibilities of the Digital Amplifier

Analog amplifiers, though not only interested in higher efficiency and a more compact size, also believe there is a great opportunity to build a digital amplifier with improved sound. When a digital amplifier’s signal value is 1 (the current is flowing from the power supply to the speakers), the amplifier elements in the output stage remain completely open. Broadly speaking, there is little resistance that consumes power between the power supply and the speakers. Consequently, there is little power loss. In contrast, with analogue amplifiers, there is always some resistance between the power supply and speakers because of the manner in which the amplifier operates.

Furthermore, since the output elements are used as switches in a digital amplifier, properties such as linearity (crucial in an analogue amplifier) are not particularly significant. By reducing the number of parameters that the amplifier must control, it is easier to ensure that the elements will be driven as intended in all circumstances. We believe that the potential of digital amplifiers lies in more accurate signal reproduction.

Another potential attraction is that low-frequency reproduction places little load on the power supply. Analogue recording techniques have limitations when recording low-frequency sounds. However, digital recording, which has become the dominant method for storing and reproducing audio data, has eliminated these limitations. For this reason, more and more of today’s music is based on powerful low-frequency sounds. These recordings contain bass power in all its intensity.

Onkyo’s Approach to Digital Amplifiers

Based on the research of Onkyo’s development team, we believe power supply is essential to achieving quality sound from digital amplifiers, even though their efficiency far exceeds that of analogue amplifiers. If we go back to the basics of amplification, we want to reproduce sound that you can feel, not just hear. For this purpose, we need a power supply with the lowest possible impedance and superior transient responses. Very few manufacturers are building digital amplifiers with power supplies that follow our concept.

A great deal of attention has been given to power supply performance in every Onkyo digital amplifier. In fact, in our digital amplifiers, we have taken this concept even further by including large-capacity transformers.

Pulse-Width Modulation (PWM) and Onkyo’s VL (Vector Linear) Digital

In digital amplifiers, there are two methods of pulse width modulation (PWM): in which analogue quantity is represented by the width of the pulse, and pulse density modulation (PDM), in which analogue is represented by the number of pulses. Onkyo uses the PWM approach for a number of reasons:

1) PWM produces far less digital noise in the higher frequencies than PDM.
2) PWM is more efficient than PDM in terms of delay relative to the pulse input.
3) PDM is dependent on a large amount of negative feedback (NFB)—approaching 100% loss on an analogue amplifier, a little NFB will completely affect the sound.

Up to now, PWM has been used as an efficient method of amplifying audio signals. Theoretically, this method should result in accurate analogue-to-digital conversion. In reality, a digital amplifier generates a lot of "noise spikes" from sources within the pulse-width modulator circuitry. The spike noise introduces errors into the inversion timing, making accurate conversion into pulse width impossible. So, to further improve the precision of amplifiers, we have had to push even further. Our response is a highly accurate analogue-to-digital conversion circuit—VL Digital—that is unaffected by noise in the analogue signal.

Onkyo’s VL (Vector Linear) Digital technology comprises a vector generator an inversion trigger generator. When the analogue input signal reaches the vector generator outputs a current proportional to the size of the analogue input. This current is sent to the inverter which inverts it. When the charge quantity reaches a specified value, the trigger operates and inverts the output pulse. Circuits change and invert alternately performing pulse width modulation proportional to the analogue signal.

The upper and lower portions of the spike noise waveform are symmetrical, so they have the same area. Therefore, if the analogue signal contains spike noise, their charge quantity will cancel each other out. This will ensure accurate pulse width modulation at high frequencies. Onkyo’s third-generation VL Digital technology includes an inverted Darlington circuit that goes beyond earlier versions to accurately produce a current flow based on the input voltage.

Offering Dedicated Audio Engineering with Versatile Music Playback

VL Digital Technology

- Integrated Digital Amplifier
- CD Player
- FM/AM Tuner

Features:
- Digital Amplifier
- CD Player
- FM/AM Tuner

Specifications:
- Digital Amplifier
- CD Player
- FM/AM Tuner
Basing Music on Pure Audio Signals with On-Demand Power

The benefits of digital amplification have been recognised by the audio industry for some time. With minimal power leakage, digital amplifiers can achieve a power efficiency of up to 90%. Without the need for large heat sinks, manufacturers can focus on introducing more compact, sleeker designs. While this is an advantage in terms of saving space, it comes at the expense of one key issue—audio quality. By focusing on accurate analogue-to-digital conversion (VL Digital) and effective power supply, Onkyo’s integrated digital amplifiers lend a truly musical signature to audio reproduction.
Pure Hi-Fi Components

C-1VL CD Player
- Plays Audio CDs and CD-R/RWs™
- VLSC (Vector Linear Shaping Circuitry)
- Wolfson® 192 kHz/24-Bit DAC
- Super Precision Clock (±1.5 ppm)
- Direct Digital Path
- 2 Digital Outputs (Optical/Coaxial)
- Headphone Jack with Volume Control
- Quick Navigation for MP3 CD Playback
- 20-Step Memory Playback and 4 Repeat Modes
- 3 Mode Display (Normal/Divide/Divide/Off)
- High-Rigidity Anti-Resonant Chassis
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) Remote Control

DX-7555 CD Player
- Plays Audio CDs, MP3-Encoded CDs, CD-R/RWs™
- VLSC (Vector Linear Shaping Circuitry)
- Wolfson® (WM8740) 192 kHz/24-Bit DAC
- Super Precision Clock (±1.5 ppm)
- Digital Filter and Phase Control
- Direct Digital Path
- Massive Power Transformer
- Audiophile Grade Capacitors
- 2 Digital Outputs (Optical/Coaxial)
- Headphone Jack with Volume Control
- Quick Navigation for MP3 CD Playback
- 20-Step Memory Playback and 4 Repeat Modes
- 5 Repeat Modes (1 Group/Memory/Random/Entire Disc/1 Track)
- 4-Mode Dimmer (Normal/Dim/Dimmer/Off)
- High-Rigidity Anti-Resonant Chassis
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) Remote Control

T-4555 FM/AM RDS Tuner
- Tuner Board (DAB) Upgrade Capability
- FM/AM Auto Tuning
- 40 FM/AM Presets
- 2025/4974 (77-108 MHz)
- High Direct Access Tuning (via Remote)
- 12V Input and Output
- 12V Trigger Input and Output
- 16-Bit Anti-Resonant Chassis
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) Remote Control

T-4355 FM/AM RDS Tuner
- FM/AM Auto and Manual Tuning
- Auto Preset (20 FM/10 AM)
- QMA (Vector Quantizer Audio) Conversion Technology
- Change up to 3 Discs During Play
- Wolfson® 192 kHz/24-Bit DAC
- Direct Digital Path
- 2 Digital Outputs (Optical/Coaxial)
- 2-Track Programming
- 3 Mode Display
- Headphone Jack with Volume Control
- Quick Navigation for MP3 CD Playback
- 20-Step Memory Playback and 4 Repeat Modes
- 5 Repeat Modes (1 Group/Memory/Random/Entire Disc/1 Track)
- 3-Mode Dimmer (Normal/Dim/Dimmer/Off)
- High-Rigidity Anti-Resonant Chassis
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) System Compatible

DX-C390 6-Disc CD Carousel Changer
- Plays Audio CDs, MP3-Encoded CDs, CD-R/RWs™
- VLSC (Vector Linear Shaping Circuitry)
- VQA (Vector Quantizer Audio) Conversion Technology
- Change up to 5 Discs During Play
- 192 kHz/24-Bit ADC
- Direct Digital Path
- 2 Digital Outputs (Optical/Coaxial)
- 40-Track Programming
- Next Selection Function
- 4 PM3.5 (ESD-150/4-300/4-300/4-300)
- 6 Repeat Modes (Entire Disc/All Discs/Random Tracks/Programmed Tracks/Random Memory/Single Track)
- Brushed Hairline Aluminium Front Panel
- Bird Interactive) Remote Control
- Discs that have not been properly finalised may only be partially playable or not playable at all.

DX-7355 CD Player
- Plays Audio CDs, MP3-Encoded CDs, CD-R/CD-RWs™
- VLSC (Vector Linear Shaping Circuitry)
- Wolfson® 192 kHz/24-Bit DAC
- Massive Power Transformer
- Audiophile Grade Capacitors
- 2 Digital Outputs (Optical/Coaxial)
- Headphone Jack with Volume Control
- Quick Navigation for MP3 CD Playback
- 20-Step Memory Playback and 4 Repeat Modes
- 5 Repeat Modes (1 Group/Memory/Random/Score Disc/Track)
- 3 Mode Display (Normal/Disc/Divide/Disc/Division)
- High-Rigidity Anti-Resonant Chassis
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) Remote Control

TA-RW255 Double Auto-Reverse Cassette Deck
- Outlet® B and C Noise Reduction
- CD-to-Tape Synchro Running
- Disc Level Control
- Auto Tape Bias Adjustment
- Auto Space and Start Mode
- 1000 Track Programming
- 8 Segments Peak Level Meters
- Peak Hold
- Brushed Hairline Aluminium Front Panel
- RI (Remote Interactive) System Compatible
- Discs that have not been properly finalised may only be partially playable or not playable at all.

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Introducing the Speaker World to a Brand New Onkyo Personality

D-312E 2-Way Bass Reflex Speakers
- 16 cm A-OMF Monocoque diaphragm woofer
- 4 cm ring drive tweeter
- Die-cast frame construction to prevent vibration
- V-line edge to counteract unwanted diaphragm vibration
- Aero Acoustic Drive for powerful and natural sound
- Wood-finished cabinet
- Gold-plated banana plug-compatible speaker posts
- Magnetically shielded
- Max. input power: 200 W
- Frequency response: 25 Hz–150 Hz
- WHD: 275 x 473 x 428 mm
- 4.6 kg

D-302E 2-Way Bass Reflex Speakers
- 16 cm A-OMF Monocoque diaphragm woofer
- 4 cm ring drive tweeter
- Die-cast frame construction to prevent vibration
- V-line edge to counteract unwanted diaphragm vibration
- Aero Acoustic Drive for powerful and natural sound
- Wood-finished cabinet
- Gold-plated banana plug-compatible speaker posts
- Magnetically shielded
- Max. input power: 200 W
- Frequency response: 34 Hz–100 kHz
- WHD: 210 x 347 x 363 mm
- 12.2 kg

D-112E 2-Way Bass Reflex Speakers
- 10 cm A-OMF Monocoque diaphragm woofer
- 3 cm ring drive tweeter
- Supported by a large voice coil (18 W)
- V-line edge to counteract unwanted diaphragm vibration
- Aero Acoustic Drive for powerful and natural sound
- Isolated wiring network design
- Gold-plated banana plug-compatible speaker posts
- Magnetically shielded
- Max. input power: 200 W
- Frequency response: 50 Hz–100 kHz
- WHD: 154 x 240 x 221 mm
- 4.1 kg

SKW-204 Bass Reflex Powered Subwoofer
- 16 cm A-OMF Monocoque diaphragm woofer
- 4 cm ring drive tweeter
- Continuous variable crossover (50 Hz–200 Hz)
- Phase switch (0° or 180°)
- Line level inputs
- Frequency response: 25 Hz–150 Hz
- Max. input power: 120 W
- Frequency response: 34 Hz–100 kHz
- WHD: 33 x 351 x 346 mm
- 2.9 kg

CR-715DAB(B/S) CD Receiver
- 50 W/Ch, Continuous (1 kHz)
- Plays CDs and MP3-Encoded CDs*
- 25-Track Programming
- 40 FM/DAB Presets
- 25-Track Programming
- 4 Timer Mode Settings (Play or Rec/Once or Every)
- 25-Track Programming
- Frequency Response: 45 Hz–100 kHz
- Frequency Response: 25 Hz–150 Hz
- Impedance: 4 Ω
- 4.2 kg

D-N10BX(B) 2-Way Bass Reflex Speakers
- 13 cm A-OMF Monocoque Diaphragm Woofer
- 3 cm Ring Drive Tweeter
- Die-cast frame construction to prevent vibration
- V-line edge to counteract unwanted diaphragm vibration
- Aero Acoustic Drive for powerful and natural sound
- Magnetically shielded
- Banana plug-compatible speaker posts
- Magnetically shielded
- Max. input power: 70 W
- Impedance: 4 Ω
- Frequency Response: 45 Hz–100 kHz
- WHD: 167 x 298 x 247 mm
- 4.2 kg

*Discs that have not been properly finalised may only be partially playable or not playable at all.

Packing the Power When You Need it Most
At first glance, the CR-715DAB will impress you with its handsome, concave aluminum front panel and a robustness of build rarely seen among mini audio systems. Give it some airplay, and you’ll find its switching amplifier design—employing VL (Vector Linear) Digital technology for accurate conversion—reproduces music with remarkable clarity. On the CD drive side, Vector Linear Shaping Circuitry (VLS) further ensures you’re getting the purest sound possible. With an emphasis on high instantaneous current capability, the CR-715DAB has the power to achieve the high performance standards that most mini systems fail to reach.
Detailed, Balanced and Spacious in Sound

**CS-515UK CD Receiver System**

- **25 Track Programming**
- **4 Tone Mode Settings** (Play or Rec/Rec or Even)
- **Bass Boost**
- **48 kHz/16-Bit D/A Converters**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**

**Optional Component**

**K-505TX(SH) Auto-Reverse Cassette Deck**

- **Auto-reverse**
- **Dolby**
- **Dolby B and C Noise Reduction**
- **Dolby AC-3 Digital Cinema**
- **Automatic Recording Level Control**
- **Auto-stop and -out**
- **Tone Arm Shunt Circuit**
- **5 x 18 cm Ring-Drive Tweeter**
- **30 W / ch, 20 Hz – 20 kHz**
- **2 x 10 cm Mid-Range Units**
- **2 x 10 cm Cone Woofer**
- **2 x 20 cm Passive Radiators**
- **35 mm (1.4 inch) Aluminium Body**
- **2.6 kg**

**CS-515A CD Receiver System**

- **25 Track Programming**
- **4 Tone Mode Settings** (Play or Rec/Rec or Even)
- **Bass Boost**
- **48 kHz/16-Bit D/A Converters**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**

**D-N9BX(W) 2-Way Bass Reflex Speakers**

- **13 cm A-Omega Microphone Diaphragm Woofer**
- **3 cm Ring Drive Tweeter**
- **Aero Acoustic Drive for Powerful and Natural Sound**
- **Super Bass and Time Control**
- **2.4 kg**

**UW-1 Wireless USB Audio Transport**

- **Non-Compressed, High-Fidelity Music Playback**
- **Panasonic DVD, DivX, MP3, WMA, AAC, Internet Radio**
- **Compatibility with Mainstream Programs such as iTunes, Windows Media Player, Real Player etc.**
- **RDS (PS/RT)**
- **40 FM/AM Presets**
- **4 Timer Mode Settings** (Play or Rec/Once or Every)
- **25-Track Programming**
- **Optical Digital Input**
- **4 Audio Inputs and 2 Outputs**
- **High-Current, Low-Impedance Drive**
- **VLSC (Vector Linear Shaping Circuitry)**
- **Super Bass and Tone Control**
- **Subwoofer Pre-Out**
- **Optimum Gain Volume Circuitry**
- **SCART Connector**
- **Aero Acoustic Drive for Powerful and Natural Sound**
- **3 cm Ring-Drive Tweeter**
- **108 MHz/12-Bit Video DAC**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.4 kg**

**CS-V815 Universal AV Receiver System**

For a relatively diminutive AV receiver system, the CS-V815 really does cover all the bases. The ability to handle the most advanced audio formats, DVD-Audio and Super Audio CD, along with regular CDs and recorded digital MP3 files, is impressive enough. But the CS-V815 will also enable you to play back DVD sources with a virtual surround soundfield, and it takes DTS* and Dolby* Digital sources into the full 5.1-channel realm with connection to a power (main) amplifier and speakers. With its space-saving qualities and versatility, the CS-V815 will readily integrate into virtually any space of your choice and give you greater entertainment options.

**DR-815 Universal AV Receiver**

- **350 W/CH, 25 Hz – 100 kHz**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.6 kg**

**DR-815**

- **350 W/CH, 25 Hz – 100 kHz**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.6 kg**

**UWL-1 Wireless USB Audio Transport**

- **Non-Compressed, High-Fidelity Music Playback**
- **Panasonic DVD, DivX, MP3, WMA, AAC, Internet Radio**
- **Compatibility with Mainstream Programs such as iTunes, Windows Media Player, Real Player etc.**
- **RDS (PS/RT)**
- **40 FM/AM Presets**
- **4 Timer Mode Settings** (Play or Rec/Once or Every)
- **25-Track Programming**
- **Optical Digital Input**
- **4 Audio Inputs and 2 Outputs**
- **High-Current, Low-Impedance Drive**
- **VLSC (Vector Linear Shaping Circuitry)**
- **Super Bass and Tone Control**
- **Subwoofer Pre-Out**
- **Optimum Gain Volume Circuitry**
- **SCART Connector**
- **Aero Acoustic Drive for Powerful and Natural Sound**
- **3 cm Ring-Drive Tweeter**
- **108 MHz/12-Bit Video DAC**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.4 kg**

**CS-V815 Universal AV Receiver System**

For a relatively diminutive AV receiver system, the CS-V815 really does cover all the bases. The ability to handle the most advanced audio formats, DVD-Audio and Super Audio CD, along with regular CDs and recorded digital MP3 files, is impressive enough. But the CS-V815 will also enable you to play back DVD sources with a virtual surround soundfield, and it takes DTS* and Dolby* Digital sources into the full 5.1-channel realm with connection to a power (main) amplifier and speakers. With its space-saving qualities and versatility, the CS-V815 will readily integrate into virtually any space of your choice and give you greater entertainment options.

**DR-815 Universal AV Receiver**

- **350 W/CH, 25 Hz – 100 kHz**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.6 kg**

**DR-815**

- **350 W/CH, 25 Hz – 100 kHz**
- **WRAT (Wide Range Amplifier Technology)**
- **Dolby Digital**
- **Dolby Pro Logic II**
- **V-Line Edge to Counteract Unwanted Diaphragm Vibration**
- **Banana Plug-Compatible Speaker Posts**
- **Super Bass and Time Control**
- **2.6 kg**
Creating the Right Vibe Where It’s Needed Most

CBX-100 CD Receiver System

CD Receiver Features
• 5 Watts for Each Channel
• Plays CDs, MP3-Encoded CDs and WMA-Encoded CDs*
• Stereo CD Loading Mechanism
• Automatic Mode for MP3/WMA
• 20 Tuner Programming
• Random/Repeat/1-Channel Play Modes
• 2 Preset Mode (Tuner/CD)
• 5-Tuner Mode Settings (On/Every/Everyday/Disc Set)
• Sleep Timer
• Snooze Function
• 20 STEREO preset memory
• RDS & AccuClock
• Headphone Jack
• Compatible with RI Dock for the iPod
• RI (Remote Interactive) Compatible Remote Control

*Discs that have not been properly finalised may only be partially playable or not playable at all.

Speaker Features
• Sleep Timer
• Snooze Function
• 30 FM/AM Presets
• Automatic FM/AM Scan Tuning
• RDS & AccuClock
• Battery-Free Memory Backup
• Headphone Jack
• Compatible with RI Dock for the iPod
• RI (Remote Interactive) Compatible Remote Control

Enliven Any Room with Elegant Style and Crisp, Clear Sound

CR-L5PA CD Receiver/Speaker Package

• 5-Way Acoustic Suspension Front Speakers
• 2-Way Bass Reflex Power Subwoofer
• Multi-DAC Audio Amplifier
• 192 kHz/24-Bit Audio DAC
• 108 MHz/14-Bit Video DAC
• Progressive Scan Video Output
• DVD Onscreen Set-Up
• Theater Dimensional Virtual Surround Function
• 40 FM/AM Radio Presets
• Compatible with RI Dock for the iPod
• Full-Function RI (Remote Interactive) Remote Control

*Discs that have not been properly finalised may only be partially playable or not playable at all.

The LS-V501 is shaping up as one of those classic Onkyo A/V systems that blend A/V perfection with style and sublime construction. With obvious leanings towards HD entertainment, the LS-V501 sports HDMI connectivity for the latest plasma and LCD displays. Working from a 2-channel set-up, this package provides “channelled sound” movie entertainment from DVDs and DivX. On another front, it gives you a stack of music options, from MP3s right through to the audiophile quality of DVD Audio and Super Audio CD. The accompanying speakers are sized for placement in a variety of set-ups, while the gloss-finished subwoofer adds to the LS-V501’s overall chic.

Cinematic Brilliance, Terrific Musicality, Undeniable Style

The LS-V501 is shaping up as one of those classic Onkyo A/V systems that blend A/V perfection with style and sublime construction. With obvious leanings towards HD entertainment, the LS-V501 sports HDMI connectivity for the latest plasma and LCD displays. Working from a 2-channel set-up, this package provides “channelled sound” movie entertainment from DVDs and DivX. On another front, it gives you a stack of music options, from MP3s right through to the audiophile quality of DVD Audio and Super Audio CD. The accompanying speakers are sized for placement in a variety of set-ups, while the gloss-finished subwoofer adds to the LS-V501’s overall chic.

Creating the Right Vibe Where It’s Needed Most

CBX-100 CD Receiver System

CD Receiver Features
• 5 Watts for Each Channel
• Plays CDs, MP3-Encoded CDs and WMA-Encoded CDs*
• Stereo CD Loading Mechanism
• Automatic Mode for MP3/WMA
• 20 Tuner Programming
• Random/Repeat/1-Channel Play Modes
• 2 Preset Mode (Tuner/CD)
• 5-Tuner Mode Settings (On/Every/Everyday/Disc Set)

Speaker Features
• 8 cm Full-Range Bass Reflex OMF Diaphragm
• Aero Acoustic Drive for Powerful and Natural Sound
• Separated Speaker Enclosures for Improved Sound Quality

*Discs that have not been properly finalised may only be partially playable or not playable at all.
Do More with Your iPod—with Onkyo’s Imaginative Sight and Sound

**Glossary**

**DS-A2X** Remote Interactive Dock

Spray Audio and Video Playback

Printable lyrics, video, and iPod control with a remote.

Control from Anywhere

With your remote, it’s easy to play music, view images, and watch videos from anywhere and anywhere.

Remote Control

Easily control your Home Cinema System from anywhere in your house.

Charged and Ready to Go

Perfect as a charging station. So, while you’re powering iPods, you can use the DS-A2X to control your home cinema system.

**DS-A1X** Remote Interactive Dock

Connects, Controls, Enhances, Remote control to your iPod’s video library—or digital photos—without you having to be in the same room.

Printable Lyrics and Video Playback

With your remote, you can view printable lyrics and video while you’re watching a movie.

Relax Those Digital Moments

Stream music and videos through your home cinema system and enjoy the perfect audio experience.

Charged and Ready to Go

Perfect as a charging station. So, while you’re powering iPods, you can use the DS-A1X to control your home cinema system.

**DOBLY® TRUE HD**

Dolby TrueHD is Dolby’s next-generation lossless technology developed for high-definition disc-based media. Dolby TrueHD audio is bit-for-bit identical to the highest-resolution studio masters. Together with high-definition video, it offers an unprecedented home theatre experience. Now listeners can enjoy sound as stunning as their high-definition pictures. Dolby TrueHD is a mandatory standard for the HD DVD format and an optional standard for Blu-ray Disc.

**DOBLY® DIGITAL PLUS**

Dolby Digital Plus provides the flexibility and efficiency to deliver more channels of compelling surround sound for high-definition video via cable and direct. Immediate satellite (DVB) via disc-based media, and via internet content. The superior coding efficiencies enable a high-quality multichannel audio experience without negatively impacting bit budgets allocated for video performance or additional feature sets.

**DTS-HD® MASTER AUDIO**

DTS-HD Master Audio is capable of delivering audio that is bit-for-bit identical to the studio master. DTS-HD Master Audio delivers audio at super-high variable bit rates—up to 22.5 Mbps (Mbps) on Blu-ray Disc and 18.0 Mbps on HD DVD—that are significantly higher than on standard DVD. This bit stream is so fast, and the transfer rate so high, that it can deliver 7.1 audio channels that are identical to the studio master. With DTS-HD Master Audio, you will be able to experience movies and music exactly as the artist intended—clear, pure, and uncompromised.

**DTS-HD® HIGH RESOLUTION AUDIO**

DTS-HD High Resolution Audio can deliver up to 18.0 Mbps on HD DVD—that are significantly higher than on standard DVDs. DTS-HD High Resolution Audio delivers audio at super-high constant bit rates—up to 6.5 Mbps on Blu-ray Disc and up to 3.0 Mbps on HD DVD. It allows content creators to deliver rich, high-definition audio on movies where disc space may not allow for DTS-HD Master Audio.

**MEETING THX® BENCHMARKS IN THX CERTIFICATION**

From early design concepts to product roll-out, THX and Onkyo work together to ensure that every A/V receiver meets THX performance standards. Every detail in the design process is rigorously analyzed and tested to ensure that the final product meets and exceeds all THX performance or additional feature sets.

**OPTIMUM GAIN VOLUME CIRCUITRY**

To produce volume levels, conventional amplifiers must initially drop a signal close to the noise floor permanently taking it with a small amount of noise. When amplified, both the signal and the unwanted noise are magnified. Optimum Gain Volume Circuitry automatically adjusts the gain so that less than half the amount of attenuation is needed, ensuring the signal never comes close to the noise floor. This protects the signal against noise, resulting in a dramatically cleaner sound.

**PURE AUDIO MODE**

Pure Audio Mode turns off the A/V receiver’s display and keeps videos in the digital domain (via HDMI) to ensure that the audio signal is protected against interference from external circuitry.

**THEATER DIMENSIONAL**

Onkyo’s exclusive Theater Dimensional circuitry takes the complexity out of conventional surround-sound setups and lets you experience the excitement of surround sound from as far as two ordinary speakers. Want more? Theater Dimensional’s unique multi-speaker modes let you place up to five speakers conveniently by the TV, for the most realistic virtual-sound surround possible.

**INTELLIVOLUME**

More often than not, the components connected to your A/V receiver are set at different volume levels. With Intellivolume, you can customize the input volume settings for all of the inputs connected to the A/V receiver. You can vary the settings from -12dB to +12dB to achieve even levels when switching from one component to another.

**CROSSOVER ADJUSTMENT**

Depending on your choice of Onkyo A/V receivers you can set the subwoofer crossover at different frequencies. Being able to choose where the subwoofer takes over gives you more precise reproduction. A lower crossover means you can select from a wider range of speaker packages and match speakers with differing crossover frequencies to your home theatre system.

**COLOR-CODED SPEAKER TERMINALS**

These color-coded speaker terminals take the guesswork out of matching wires to the correct terminals. Simply attach the color-coded label to the speaker cable, and attach the color to the same-colored speaker terminal for easy speaker connection.

**ONKYO MICRO FIBER (OMF), A-OMF & A-OMF MONOCOQUE**

Onkyo Micro Fiber (OMF), made from a pure cotton weave to absorb vibrations, was first developed to create a thick yet rigid diaphragm that enables an extremely fast and accurate response. The next stage saw the advent of A-OMF which incorporates a PEN (polyethylene naphthalate) layer with a flexible cotton weave that makes speaker cones even stronger and more resistant to heat. We then added an armored layer to create New A-OMF. The evolution has been taken a step further with A-OMF Monocoque—essentially sharing the same material composition as New A-OMF but forming a single, continuous cover over the cone. All four diaphragm types achieve improved midrange clarity and imaging for an astonishingly vivid, natural sound.

**GLOSSARY**

- **THX**
  - A technology that ensures home audio presentations worthy of THX certification.
  - Quality control at the retail, home, and dealer levels to ensure the highest-quality home theatre experience.

- **HEATERS**
  - The next stage saw the advent of A-OMF, which incorporates a PEN (polyethylene naphthalate) layer with a flexible cotton weave to absorb vibrations, was first developed to create a thick yet rigid diaphragm that enables an extremely fast and accurate response.

- **CROSSOVERS**
  - A device that determines the frequency at which a speaker will switch to another speaker. This is important for ensuring that each speaker is producing the sound frequencies that it is best suited for, and for avoiding crossover distortion.

- **ONOCOQUE**
  - The next stage saw the advent of A-OMF, which incorporates a PEN (polyethylene naphthalate) layer with a flexible cotton weave to absorb vibrations, was first developed to create a thick yet rigid diaphragm that enables an extremely fast and accurate response.

- **A-OMF**
  - A-OMF Monocoque is essentially sharing the same material composition as New A-OMF but forming a single, continuous cover over the cone. All four diaphragm types achieve improved midrange clarity and imaging for an astonishingly vivid, natural sound.

- **CROSSOVERS**
  - A device that determines the frequency at which a speaker will switch to another speaker. This is important for ensuring that each speaker is producing the sound frequencies that it is best suited for, and for avoiding crossover distortion.

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  - A device that determines the frequency at which a speaker will switch to another speaker. This is important for ensuring that each speaker is producing the sound frequencies that it is best suited for, and for avoiding crossover distortion.

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- **A-OMF**
  - A-OMF Monocoque is essentially sharing the same material composition as New A-OMF but forming a single, continuous cover over the cone. All four diaphragm types achieve improved midrange clarity and imaging for an astonishingly vivid, natural sound.
### Specifications

| Product Code | TX-NR805 | TX-SR805 | TX-SR805 | TX-SR805 | TX-SR805E | HT-S505
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<tr>
<td>Power Output</td>
<td>220 W (6 channel driven, IEC)</td>
<td>160 W (6 channel driven, IEC)</td>
<td>110 W (6 channel driven, IEC)</td>
<td>110 W (6 channel driven, IEC)</td>
<td>140 W (6 channel driven, IEC)</td>
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<td>89 dB</td>
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<td>Phono MM</td>
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<td>High Resolution USB</td>
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<td><strong>Input/Output Specifications</strong></td>
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<td>Dynamic Power</td>
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<td>Phono MM</td>
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<td><strong>A/V Receivers</strong></td>
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<td>Component Video In/Output</td>
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<td><strong>General</strong></td>
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<td>435 x 61 x 215.5 mm</td>
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**Note:** *Channels are measured separately.*