

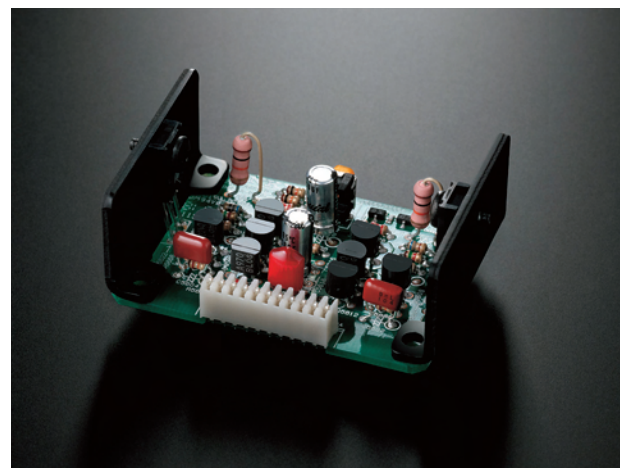
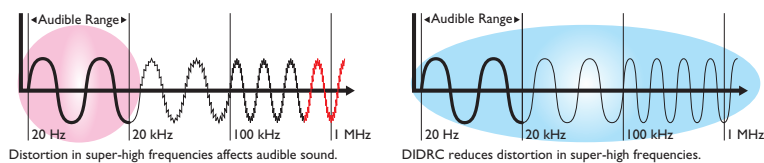
Reference Hi-Fi Series



Audiophile Hi-Fi Components Deliver True Musicality

DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)

Since the advent of digital audio, signal-to-noise ratios have improved dramatically. However, the S/N ratio reflects static noise only, and takes no account of another type of noise that occurs as the byproduct of sound reproduction—dynamic noise. To reduce this type of noise, Onkyo has developed DIDRC technology for use in our hi-fi components. Despite being beyond the normal range of human hearing, frequencies above 100 kHz are susceptible to clock pulse and other forms of distortion from digital devices. Such distortion in the super high frequency range can generate “beat interference”, which in turn affects the character or atmosphere of the original sound. By improving linearity and reducing distortion in the super high frequency range, Onkyo’s new DIDRC technology effectively reduces perceptible noise and delivers clearer-than-ever audio.



AWRAT (Advanced Wide Range Amplifier Technology)

Onkyo’s advanced AWRAT design for power amplification comprises DIDRC and the following technologies:

Low Negative-Feedback Design

Too much NFB makes a system susceptible to counter-electromotive force from the speakers, resulting in a drop in perceived sound quality. To avoid this, Onkyo focuses on improving the frequency response and reducing distortion, without relying so much on NFB.

Closed Ground-Loop Circuits

AWRAT amplifier models employ a sophisticated closed-circuit design in which each circuit has a separate link to the power supply. This helps to cancel individual circuit noise and keep the ground potential free of distortion.

HICC (High Instantaneous-Current Capability)

HICC enables an amplifier to immediately cancel the speakers’ reflex energy and instantaneously send out the next signal. The same high current required to achieve this also supports the amplifier’s ability to handle speaker impedance fluctuations.

Symmetrical Twin-Monaural Construction

Power devices for the left and right channels of AWRAT amplifiers are aligned symmetrically. Each channel has the same electrical and structural design, and signal pathways are uniform in length. This helps to minimize errors in stereophonic playback.

