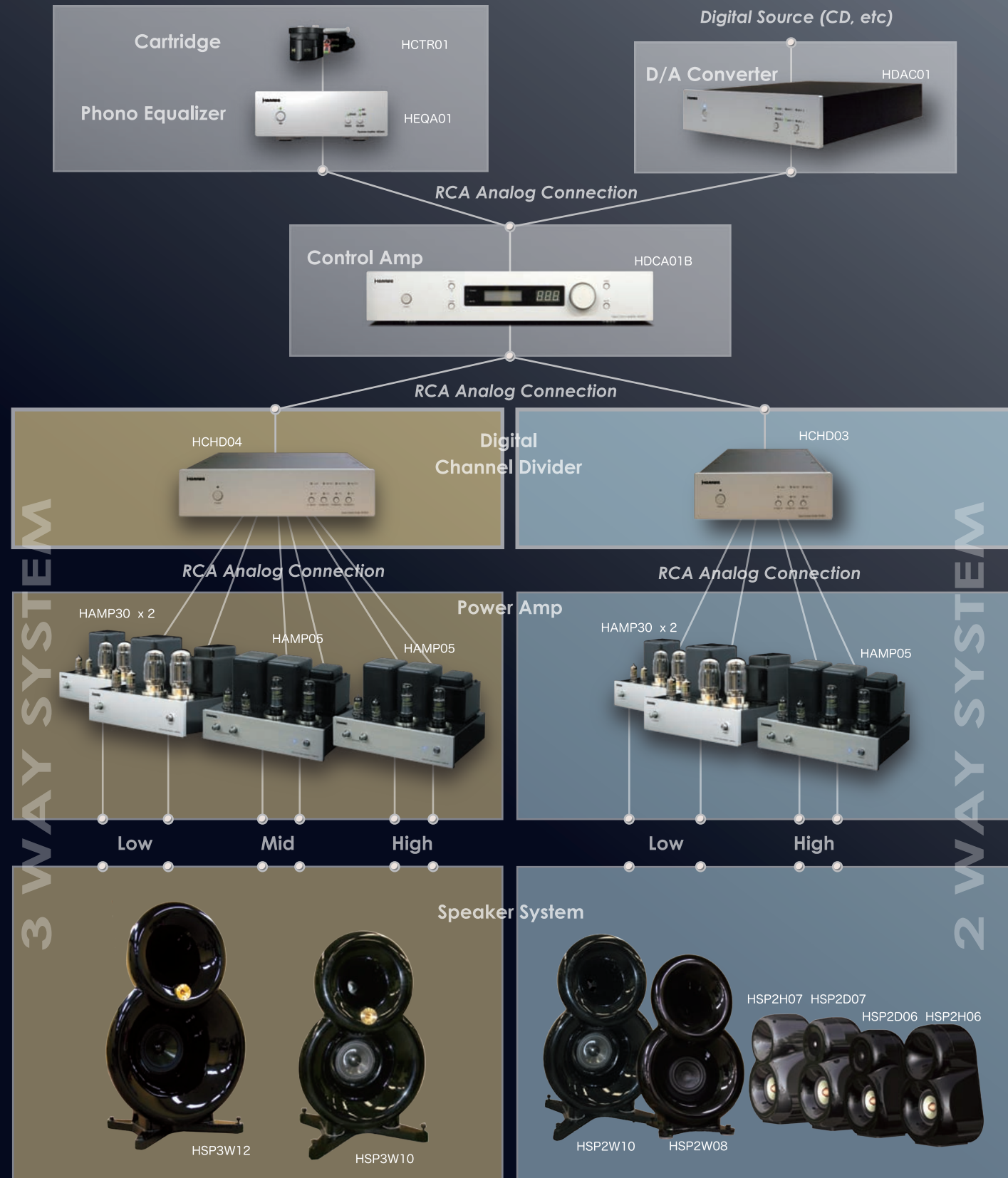




HANIWA AUDIO SYSTEM PRODUCT LINE UP



NEVER HEARD BEFORE HANIWA.

SOUND STAGE APPEARS
IN FRONT OF YOU.



JUST SIT, RELAX
AND ENJOY.



Haniwa System

Quest :

Develop the system to reproduce
the sound signal with highest fidelity.

Principles :

- Return to the basic of music reproduction.
- Follow the primary theory of sound.
- Put all the technologies, analog & digital.

Achievement :

Developed the system,
with the tightest control of phase
characteristics,
capable of reproducing
the music world astonishingly rich.

The sound is so natural
that listeners would not even recognize
the existense of speakers.



CONTACTS

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(The contents of this document are subject to change without prior notice.)

Conventional phono equalizers were designed to equalize only the gain curve. But their phase characteristic is problematic to cause the distortion of the wave form. Haniwa's phono equalizer adopted the circuit design, which minimizes the deviation of gain curve and flattens the phase shift over full bandwidth.

HANIWA digital control amplifier accepts various input signals, analog and digital, and converts all of them into 192kHz/24bit format. 192kHz is necessary not only to cover the high harmonics, but also to remove the phase shift while high-cut filtering in D/A conversion. By choosing the sampling rate of 192kHz, the high-cut frequency can be set to higher frequency than the audio bandwidth, and thus the phase shift in the audio bandwidth is significantly suppressed.

If the phase shift happens while the filtering work in dividing the sound into woofer, squaker and tweeter channels, the sound wave form is already distorted, and the resulting sound, the sum of these distorted sounds, should be further distorted. This means the sound reaching to listeners has lost its sharpness.

HANIWA channel dividers are equipped with the following unique functions.

- the FPDC (Frequency and Phase Dual Control) function
- time shift adjustment for multi-way speakers
- the feed forward function for the deep bass boost

HANIWA power amplifiers is designed to have necessary and sufficient power to drive the horn type Haniwa speaker systems. Accordingly, their noise level is controlled low and at the same time quite speedy. Accordingly, they achieve the sharp transient performances.

HANIWA speaker systems are designed as the transducer to output sound accurately to the original sharp wave form. Their horn is the improved Tractrix horn, and has the unique cabinet shape to suppress the harmful radiation from the cabinet.