

AIR  
TIGHT

Dynamism of Music in  
vivid reality

Control Amplifier  
**ATC-7**



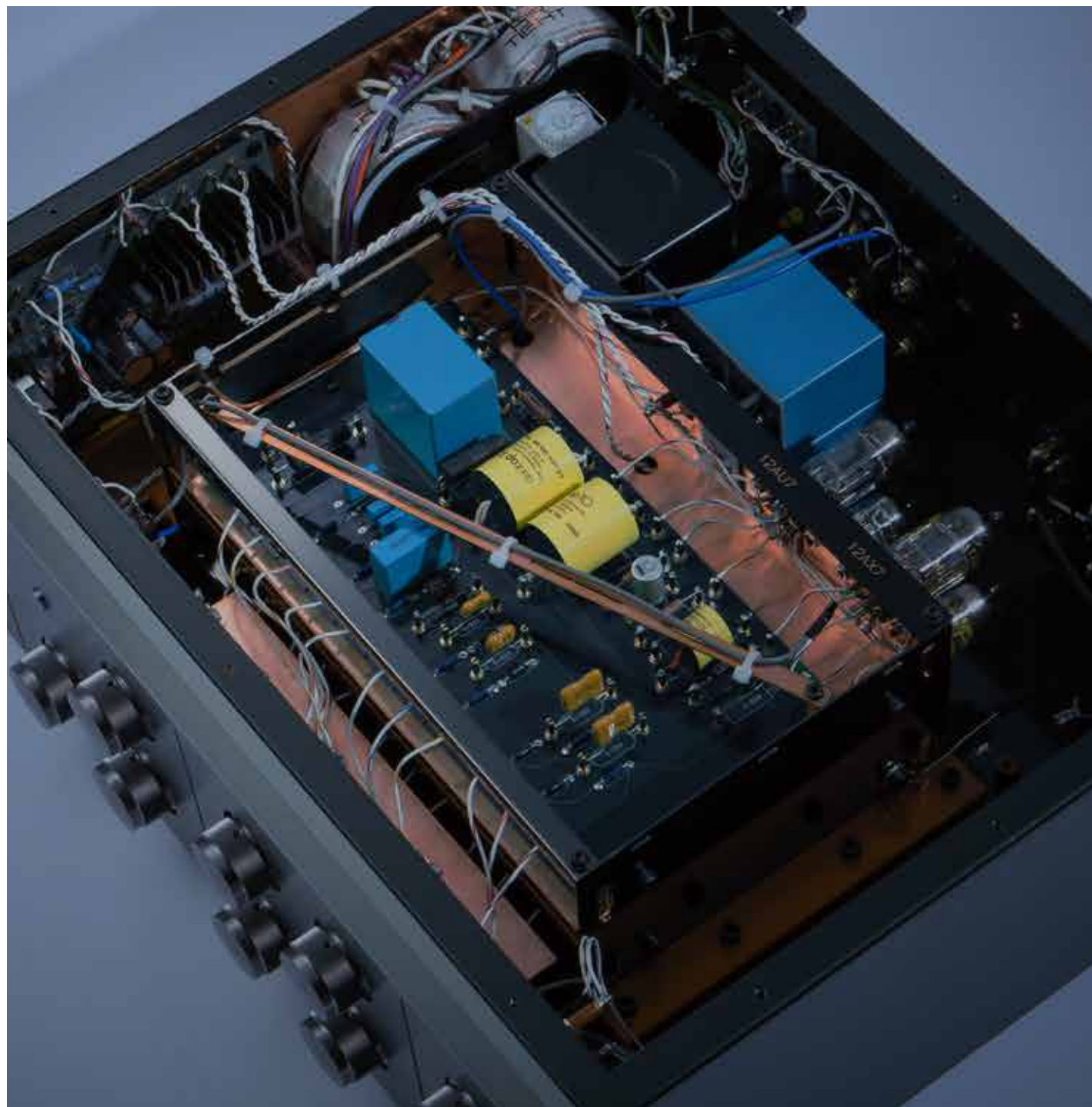
An amp with multiple control knobs on the front panel, now again. The control amplifier that "we wanted and wanted to make" was such an authentic style amplifier.

Nowadays, all necessary operations for audio equipment are integrated into a remote control, and it seems that one trend is to operate via smartphones using WiFi or Bluetooth instead of infrared. While audio operations are being replaced by touch panels or mobile devices, Airtight wants to return to the pleasure of accessing amplifier and operating control knobs directly. Because we remember that manipulating amplifiers with physical feedback was an important aspect of audio pleasure that being lost. For the control amplifier "ATC-7", we wanted to re-create the joy of directly manipulating the sound with our own fingers, so we redesigned the knobs, created a texture that feels right to the touch, and created the ideal knurling feel and rotation.

On the other hand, the most important thing for airtight amplifiers is whether the music sounds attractive. We didn't set a deadline for the development period, we spent as much time as needed and used every possible idea. In the power supply circuit, we have adopted a combination that is not a standard for audio: an ultrahigh-performance regulated power supply and a choke coil. The housing is a combination of new and orthodox Bakelite & Steel. We realized the ideal sound that we envisioned by designing parts, materials, and mechanisms.

The vividness, engraving depth and dignity of the sound that emerges over the speakers. You can feel the "tame" of the music, and the dynamism that conveys the vitality of the sound.

The ATC-7 is full of the unique charm that can only be experienced through audio, and the joy of enjoying music.



## Features

### [Power Section]

Toroidal power transformers with low leakage flux are used for the power supply, which is the key to sound. Two transformers, one for high-voltage power supply and the other for low-voltage power supply, are installed, and rigidly mounted on the main chassis by thick pure copper substrates. A high-performance regulated power supply designed new and exclusively for the ATC-7 reduces effect from flickers on commercial power supplies, and provides clean and stable power via a high-performance audio signal range choke coil. In addition, large capacity film capacitor in the decoupling circuit is incorporated. Electrolytic capacitors are eliminated from both the signal and the decoupling circuits which contributes to the transparency of the sound.

### [Input Section]

A Mechanical rotary selector switch which resist to degradation over time is used for input selector. ATC-7 is equipped with 3 RCA inputs and 2 XLR inputs.

PTFE insulated High-density, high-quality shielded wires are used for the cables from each input terminal, minimizing the loss of audio signals and suppressing crosstalk between the left and right channels. "Presence control", "Bass Compensator", and "Gain Trim" are equipped with mechanical rotary switches that provide a nimble operational feel, providing joys of adjusting the sound quality. The Left and Right channels are configured back to back inside an Inner Chassis which is suspended from top of main chassis, and a pure copper shielding plate is arranged in between to prevent interference. For Main Volume, ALPS RK-501 High Quality Volume is incorporated.

### [Amplification Section]

This is a 2-stage NF type SRPP (shunt regulated push-pull) consisting of a twin triode 12AX7 and a 12AU7 for each channel. A mirror configuration in which the L/R channel amplifiers are arranged vertically symmetrically. The amplification section is housed in a black chrome-plated inner chassis, and printed circuit boards are fixed on a thick pure copper bathtub-shaped substrate inside. The inner chassis is firmly fixed from the ceiling of the monocoque chassis via a specially made Bakelite bar.

This bakelite bar provides electrical isolation of the amplification unit from the main chassis while integrating resonance.

The front panel is made of 15mm thick aluminum cut with an NC lathe, and the surface is anodized. Equipped with a timer relay circuit when the power is turned on, even when combined with a solid-state power amplifier, noise is not generated when the power is turned on.

### [Front Panel]



### [Rear Panel]



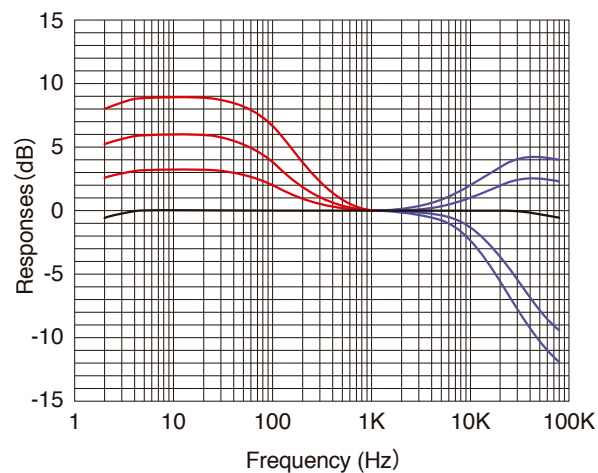
### 3 types of Control Features

**1. Presence Control** : You can control the high frequencies of the musical source, the nuances of the instrument, and the character of the recording by gain trim upper limit of audible frequency (Around 20kHz). In addition, the change in the energy balance in the ultra-wide area affects the sense of sound field and the nuances of the space, allowing user for fine tuning of listening environment.

**2. Bass Compensator** : Help to compensate frequencies below 100Hz when listening at small volume, or lack of lows in input source.

**3. Gain Trim** : Gain of amplifier can be adjusted in 1dB increment independently for Left & Right channel.

Control Characteristics



### [Specifications]

Tube incorporated : 12AX7×2, 12AU7×2

Input : 5 channels (RCA×3/XLR×2) Unbalanced

Input Impedance : 100kΩ (gain19dB)

Output : RCA×2 Channels (XLR unbalanced as option)

Output Impedance/ (Recommended Load : Total>47kΩ)

THD : 0.02% (1V/1kHz)

Output Voltage : 20V (load 100kΩ/1%THD)

Frequency Response : 10Hz~100kHz (z -1dB)

Power Consumption : 50VA

Dimensions : W400mm×D350mm (including knobs)×H145mm

Weight : 13.5kg

# AIR TIGHT

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