

audio-technica®

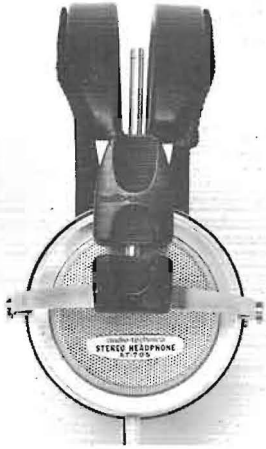


ELECTRET CONDENSER STEREO HEADPHONE

AT705



OWNER'S MANUAL



Your new AT705 stereo headphone consists of a lightweight, comfortable headphone and a separate impedance matching adapter which connects to the amplifier output of your stereo system.

The technical expertise and manufacturing skill of Audio-Technica, makers of the highly acclaimed Dual Magnet phono cartridges, were fully exploited to bring you this excellent headphone set featuring a wide-range flat response and clear, natural sound.

As with our other headphone models, the functionally sensible bi-polar, open-back construction was applied to this headphone. This design not only reduces weight and bulk but also improves transient response and eliminates the "closed-in" feeling which is a cause of discomfort when using the conventional, closed-back headphone.

The convenient impedance matching adapter does not require a separate power source, thus eliminating the usual cause of static and possible damage to the driver units. Simply hook it up to your stereo amplifier and you are ready for an experience in superb music enjoyment.

YOUR AMPLIFIER

The adapter can be connected to any amplifier with an output of over 3 watts and designed for use with 4 to 16-ohm speakers, either transistor or tube type, or even a professional BTL model. Since the AT705 is a

highly sensitive instrument, your amplifier should be of a comparable high quality with low distortion and noise levels. The adapter should be connected to the speaker terminals of the amplifier, not the headphone terminals.

CONNECTIONS

The connecting cords of the adapter are color-coded as follows:

- Red: R+ (right channel)
- Black: R- (right ground)
- White: L+ (left channel)
- Blue: L- (left ground)

1. After switching off the power supply of your amplifier, remove the speaker cords from the terminals and connect the adapter cords as illustrated below (Fig. 1). In some amplifier models the channel terminals may be marked "8 ohms" and the ground terminals as "O" or "Common." In the case of a tube model where the plus terminals are separated into 4-ohm, 8-ohm and 16-ohm, test-listen using each terminal and select the best one. Generally speaking, the finest effect is obtained through the 16-ohm terminal.

2. Next, connect the speaker cords to the terminals on the back of the AT705 adapter as shown in Fig. 1. Be sure that there are no loose wires which can cause short circuiting, then tighten the screws.

3. If your amplifier has an extra pair of speaker terminals, simply connect the adapter input cords to them and leave the speaker connections intact. Operating the stereophonespeaker switch of the adapter will channel the signal to the respective equipment.

4. Finally, insert the headphone cord plug into the jack of the adapter. The dent in the plug casing should face upward. This completes the necessary connections.

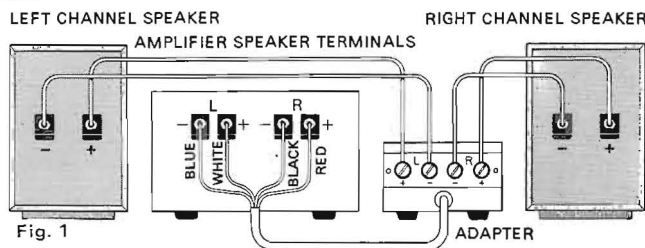


Fig. 1

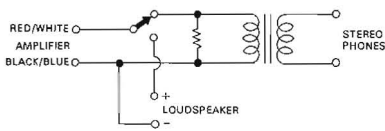


Fig. 2 ADAPTER CIRCUIT DIAGRAM

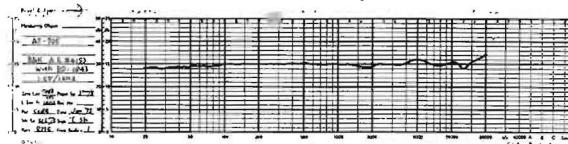


Fig. 3 FREQUENCY RESPONSE CURVE (B&K)

OPERATION

1. First, be sure that the amplifier volume is squelched to minimum level since a sudden input of excessive power can damage the driver units of the headphone.



2. Adjust the headphone so that the earpads rest snugly over your ears. Space between the

pads and your ears will cause adverse effects at low frequency response.

3. When the adapter switch is flipped to "Stereophones" position the circuit to the headphone will be completed. Switch on the amplifier and gradually raise the volume to the optimum level. Switching from phones to speakers or vice versa should always be done with the amplifier volume at minimum level.

EARPADS

The earpads used on the AT705 are designed and constructed to complement the fine performance of the equipment.



They can be detached for cleaning by firmly holding the frame and slightly turning clock-

wise till a "click" is heard. Wipe with a clean cloth dampened with a mild detergent and dry before remounting.

If the foam cushion inside the pad has deteriorated due to some reason, replace the entire earpad with a genuine Audio-Technica replacement earpad, model HP15, available from your dealer.

ADDITIONAL NOTES

1. Since the AT705 will faithfully transmit the performance characteristics of your audio components, it should be noted that the better your equipment, better will be the sound quality you will hear through the headphone.

speaker cord. However, the headphone cord has been selected with precise consideration to the total capacitance and should not be tampered with.

2. The input cord of the adapter may be lengthened by connecting any available

3. Please keep your headphone away from heat, direct sunlight and moisture at all times to ensure long, satisfactory performance.

SPECIFICATIONS AT 705

HEADPHONE

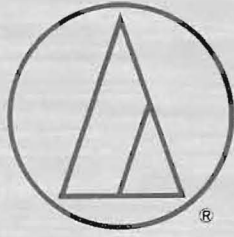
Type:	Electret Condenser
Sensitivity:	98dB ±2dB/SPL at 1kHz/100V (0dB = 0.0002 microbar/V)
Max. Sound Pressure Level:	110dB SPL
Frequency Response:	10-25,000Hz ±3dB
Total Capacitance:	100PF (incl. cord)
Weight:	250 grams (excl. cord)
Cord Length:	1.9 meters

REPLACEMENT EARPADS: Audio-Technica HP-15

ADAPTER

Primary Impedance:	4-16 ohms
Step-up Ratio:	36dB
Distortion:	under 0.3%/1kHz
Rated Input:	1.4V RMS
Max. Input:	5V RMS
Cord Length:	1.3 meters
Dimensions:	H45 × W77 × D85mm (excl. terminals & switch)
Weight:	570 grams

• Specifications are subject to change without notice.



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