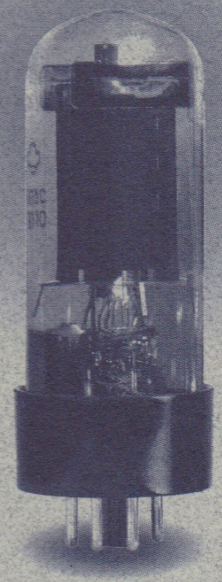
OPERATION MANUAL



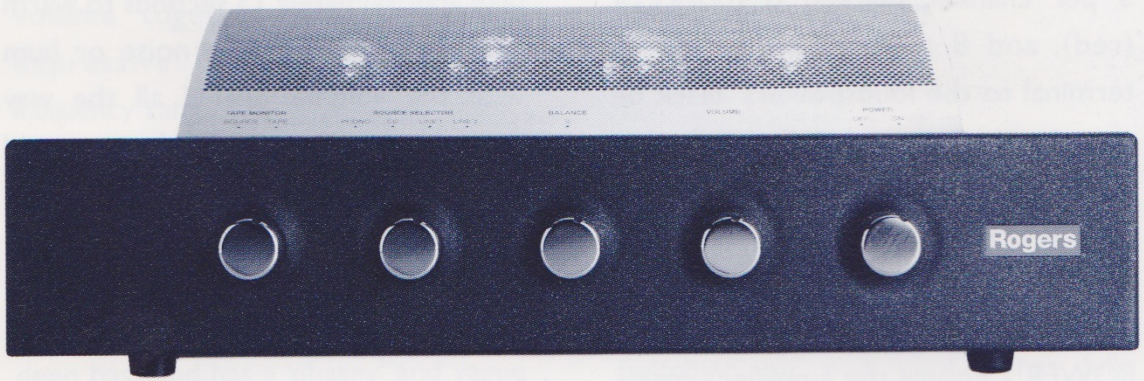
PURE CLASS 'A' STEREO INTEGRATED VALVE AMPLIFIER

E20a / E40a

Rogers

“ The merging of digital and valve technology is the perfect marriage between source and loudspeaker ”

Rogers



Unpacking

Be extremely careful when lifting the amplifier from the packaging as it is heavy and large. You will also locate the power lead inside the box. Once removed, inspect the unit for any damage which may have been caused in transit. If it is damaged in any way, contact your dealer immediately. It is always wise to retain the packaging materials should you need to transport the amplifier at any time in the future.

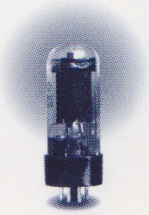
Amplifier Positioning

SAFETY - PLEASE NOTE THAT THE STAINLESS STEEL COSMETIC SAFETY GRILLE ABOVE THE VALVES GETS HOT IN NORMAL USE, THEREFORE THE AMPLIFIER MUST BE POSITIONED IN A SAFE PLACE OUT OF REACH OF YOUNG CHILDREN, PETS ETC.

DAMPNESS COULD ALSO LEAD TO DAMAGE AND CAUSE A SAFETY RISK, THEREFORE KEEP CLEAR OF WINDOWSILLS, PLANTS ETC.

HEAT CONSIDERATIONS - The E-20a/E-40a operates as a class 'A' design and generates a lot of heat, so adequate ventilation is essential for longevity and reliability. Ensure that there is free air flow to the underside of the unit by placing it on a flat, smooth surface. There should also be at least 15cm of space above the unit to allow for efficient cooling.

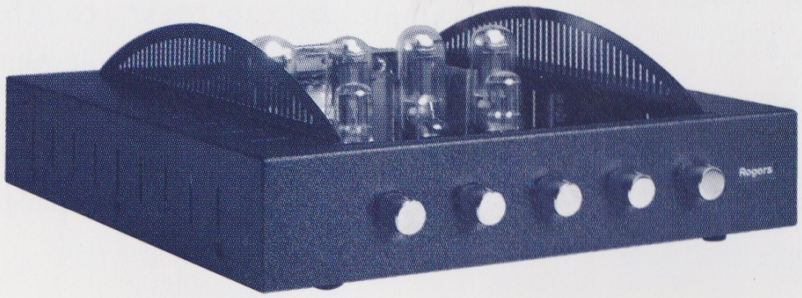
CABLES & RACKS - Best results will be obtained if the interconnect and loudspeaker leads are of high quality and are kept to sensible lengths, and for minimal acoustic coupling don't place the amplifier too near to the loudspeakers. Dedicated equipment tables and racks, although not essential will make the installation neater and will form a sturdy base for the amplifier, minimising acoustic coupling.



Connecting Up

THE SIGNAL INPUTS AND OUTPUTS - The connections to the E40a/E20a are straightforward. There are RCA type inputs at the rear of each unit. Connect your CD player and so on to the marked inputs. TAPE OUT carries the signal to the tape deck, TAPE IN accepts signal from the tape.

In most ancilliary equipment, as in the E-40a/E-20a, the left channel sockets are placed above the right channel's as a matter of convention. Next to the inputs is the ground post, this is for eliminating hum when using sensitive equipment, for example, a turntable. If the arm and turntable chassis require earthing there will be extra leads from the unit for this purpose. Experiment with grounding to obtain minimum hum.



THE SPEAKER CONNECTIONS To the left of the input sockets and ground post are the speaker terminals, 3 per channel, marked 0 (black), 4 (red), and 8 (red). Connect the 0 terminal to the loudspeakers' black or negative (-) terminal and the 8 ohm terminal to the loudspeakers' Red or positive (+) terminal, (this applies equally well to Bi or Tri-wired loudspeakers).

POWER - Ensure the amplifier's mains switch is in the OFF (0) position and connect the mains lead to the amplifier (IEC inlet on left of rear panel) and to the mains supply. Select the appropriate input on the selector and make sure the volume is turned all the way down.

Switching On

Switch on the E-40a/E-20a. The valves take approximately 15 seconds to warm up, There should be no noise or hum with the volume turned all the way down. When the amplifier has warmed up, it is ready for use.

Setting Up

To get the most from your amplifier it is neccessary to test and adjust your setup. THE IMPEDANCE TAPS: Firstly you must check which impedance tap on the output transformer is most suited to your loudspeakers. Even though loudspeaker manufacturers commonly quote impedance specifications, these can be misleading and it is best to experiment.

Play some music you know through the system, slowly bringing the volume up from zero to get a feel for the sensitivity of the system. Switch off the amplifier and move the red or positive speaker wires to the 4 ohm

terminal. Switch on and listen to the music again. The most suitable tap is the one which usually gives the greatest volume together with the more expressive dynamics and fullest frequency range.

Speaker Phasing

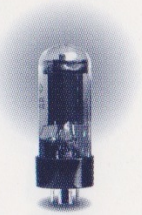
If you find that the sound is lacking deep bass and has a 'phasey' and vague centre image on both the 4 ohm and 8 ohm taps, your loudspeakers could be connected out of phase with each other. This basically means that one loudspeaker is working against the other, as the cone of one loudspeaker moves forward the other moves back. To test and rectify the situation, play some bass-rich music, and note the bass quality. If the centre image lacks bass compared to either the left or right loudspeaker, make sure that the correct terminals between the amplifier and loudspeaker are connected. Positive (red) must be connected to positive, and negative (black) to negative on both channels respectively. Phasing will result in impaired imaging and lack of bass.

Amplifier Care

GOOD PRACTICE: Turn the volume control to its minimum position when switching on, wait until it has fully warmed up (1 minute) before using high volume. Always switch off the amplifier before making any connections to it, otherwise loud thumps or hum may occur possibly damaging the amplifier or loudspeakers. The valves become very susceptible to shock when hot, so do make sure the amplifier is cooled before attempting to move it, especially in a car. Although the amplifier needs to warm up to achieve its full sound potential, it is not recommended that you leave it on permanently because this shortens useful valve life.

THE CHASSIS: There is a protective finish to ensure your amplifier stays clean throughout its lifetime. To remove dirt from the amplifier, use a duster. Furniture polish or solvents may damage the finish and should not be used.

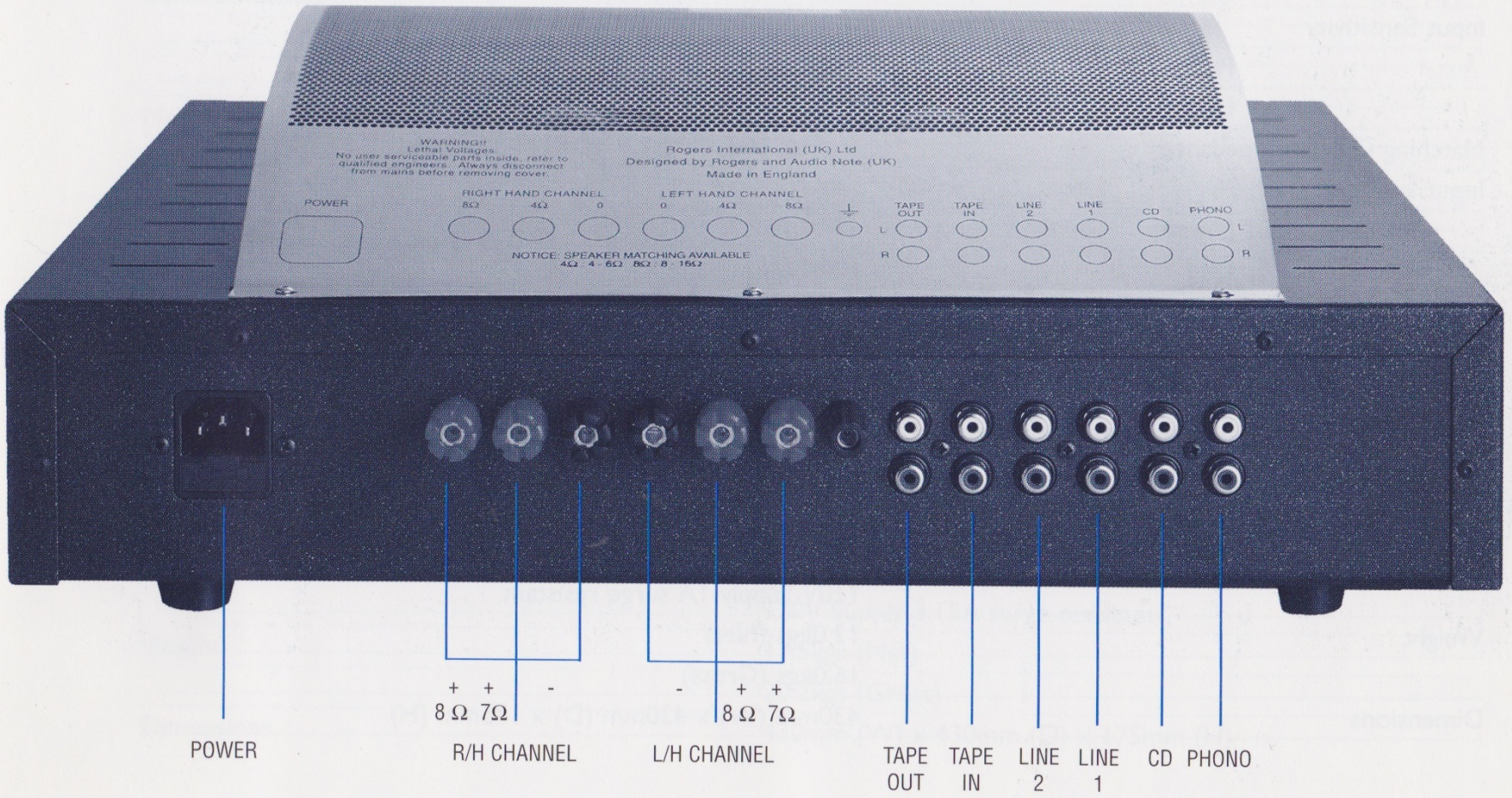
THE VALVES: The valves are conservatively run, so life should be in excess of 6000 hours. When the valves have reached the end of their lives, the sound will become quieter and will have a softer tone, the amplifier may also become noisy or hissy. Replacement valves are industry standards and are universally available.

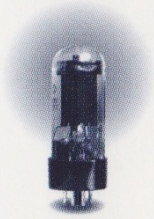


CONTROLS


E 20 a
Rogers
TAPE MONITOR
SOURCE TAPE
SOURCE SELECTOR
PHONO CD LINE 1 LINE 2
BALANCE
0
VOLUME
POWER
OFF ON
Rogers
TAPE MONITOR
SOURCE SELECTOR
BALANCE
VOLUME
POWER

INPUTS


WARNING!!!
Lethal Voltages.
No user serviceable parts inside, refer to qualified engineers. Always disconnect from mains before removing cover.
Rogers International (UK) Ltd
Designed by Rogers and Audio Note (UK)
Made in England
POWER
RIGHT HAND CHANNEL
8Ω 4Ω 0
LEFT HAND CHANNEL
0 4Ω 8Ω
TAPE OUT
TAPE IN
LINE 2
LINE 1
CD
PHONO
NOTICE SPEAKER MATCHING AVAILABLE
4Ω : 4 - 6Ω 8Ω : 8 - 16Ω
+ + -
8 Ω 7Ω
- + +
8 Ω 7Ω
POWER
R/H CHANNEL
L/H CHANNEL
TAPE OUT
TAPE IN
LINE 2
LINE 1
CD
PHONO



MODEL: E-20a

SPECIFICATION

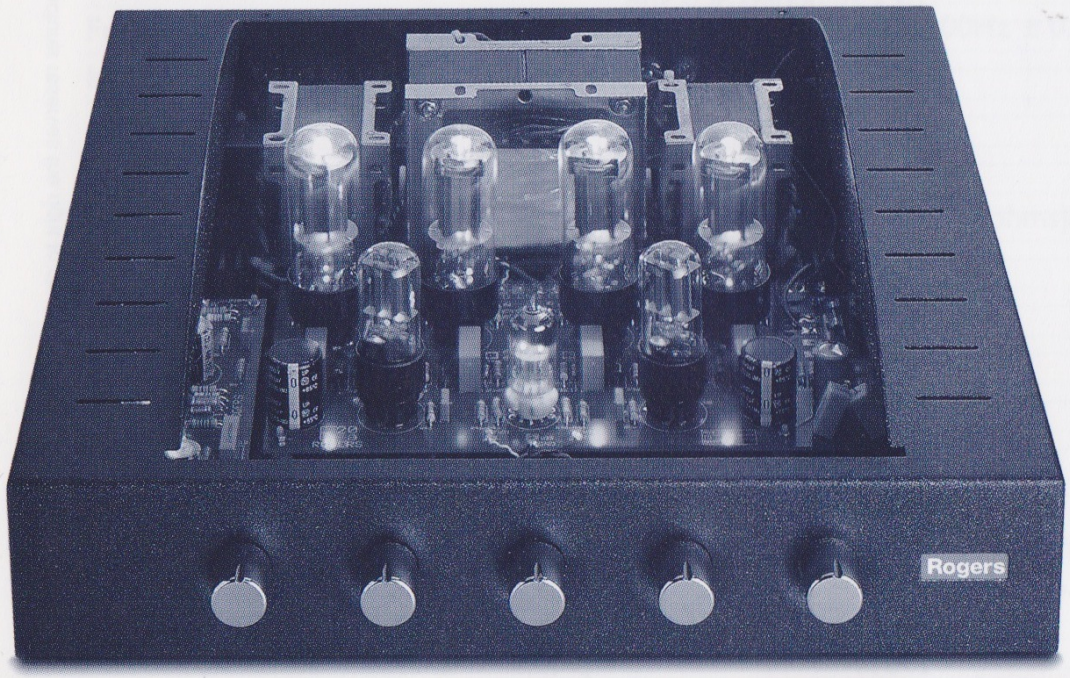
Input		Phono, CD, Line-1, Line-2, Tape
Output		Tape
Output Power		18 watts per channel Class 'A' at 6 ohms, 1kHz, 3% THD.
		Push Pull Cathode Follower Self Bias
Frequency Response		20 - 20, 000Hz ± 0.5 dB
Input Sensitivity		
	Phono	3mV
	Line	150mV
Matching Output Impedance		4 ohms (4-6 ohms), 8 ohms (8-16 ohms)
Input Impedance		
	Phono	47K ohms
	Line	100K ohms
Valves		
	Output	4 x 6L6GT
	Phase Splitter	2 x 6SN7
	Anode Follower	1 x ECC83/12AX7
	Phono Stage	2 x ECC83/12AX7
Power consumption		160W
Fuse Rating (use for owners manual)		240V Supply-1A surge resistant
		120V Supply-1A surge resistant
Weight		13.0kgs (Net)
		16.0kgs (Gross)
Dimensions		430mm (W) x 430mm (D) x 175mm (H)

MODEL: E-40a

SPECIFICATION

Input		Phono, CD, Line-1, Line-2, Tape
Output		Tape
Output Power		40 watts per channel Class 'A' at 6 ohms, 1kHz, 3% THD
		Parallel Push Pull Cathode Follower Fixed Bias
Frequency Response		20 - 20,000Hz ± 0.5dB
Input Sensitivity		
	Phono	3mV
	Line	150mV
Matching Output Impedance		4 ohms (4-6 ohms), 8 ohms (8-16 ohms)
Input Impedance		
	Phono	47K ohms
	Line	100K ohms
Valves		
	Output	8 x 6L6GT
	Cathode Follower	2 x 6SN7
	Phase Splitter	2 x ECC82/12AU7
	Line Stage	1 x ECC83/12AX7
	Phono Stage	2 x ECC83/12AX7
Power consumption		290W
Fuse Rating (use for owners manual)		240V Supply-1.6A surge resistant
		120V Supply-3.15A surge resistant
Weight		17.5kgs (Net)
		20.2kgs (Gross)
Dimensions		430mm (W) x 430mm (D) x 175mm (H)

DISCLAIMER: The manufacturer reserves the right to change specifications without prior notice



FAULT FINDING

Q - Nothing happens when I switch on?

A - Check the mains fuse located in the IEC mains inlet socket. Replace if necessary.

Q - There is a strange smell?

A - When the amplifier is new it will emit an "electrical" smell when it warms up, this is normal and will disappear with time.

Q - There is little or weak bass?

A - Check loudspeaker phasing.

Q - As the amplifier warms up it makes "pinging" or "tinkling" sounds through the speakers?

A - As the valves heat inside the electrodes expand and settle into a new position, this can cause unusual sounds but is quite normal and should not be excessive.

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BRITISH HIGH FIDELITY

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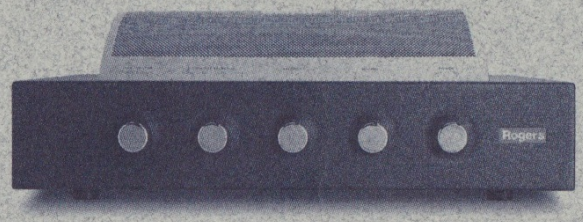
BRITISH HIGH FIDELITY



Rogers International (UK) Limited Unit 3, 310 Commonside East, Mitcham, Surrey CR4 1HX.
Tel: 0181 640 2172. Fax: 0181 685 9496.