

Lyrta Audio

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GM70 SET
Mono power amplifiers

Manual

Lyrta Audio

Guarantee

This amplifier is guaranteed against any defect in material and workmanship for a period of two years from the date of purchase. Tubes are guaranteed for thirty days.

Within this period, Lyrita Audio will repair the amplifier without charge, provided that failure was not due to misuse.

A separate guarantee card is not issued with this unit. The guarantee period begins on the day you take delivery.

Model No. _____

Specifications

Driver Tube	Russian 6E5P (1 nos)
Output Tube	Russian GM70 (1 nos)
Rectifier Tube	Russian 6C5S (1 nos)
Power Output	35 watts per channel into 8 ohms
Sensitivity	3 V input for full output
Frequency Response	40 Hz to 20 kHz
Distortion (THD)	less than 1%
Input	Line level
Output	Speakers
Mains Power	230 V, 50 Hz, 350 W (max)
Size W x D x H	360 x 520 x 200 mm
Weight	20 kg

Fuses

! Warning : In operation, this amplifier has high voltages. Always switch off, and unplug the amplifier from the mains supply before working on it. Wait for 5 minutes for the high voltages to die down, before opening the amplifier!

The amplifier is protected against overload by fuses at three points. The mains supply fuse is mounted on the rear panel and is easily accessed from the outside.

Inside the amplifier are two fuses on the high voltage supply. These are mounted on the inside panel above the power supply capacitors. To reach the internal fuses, remove the back top plate of the amplifier.

Mains supply fuse 2 A, 250V (RQB 4000)

High Voltage supply fuse 200mA, 250V (RQB 200)
 100mA, 250V (RQB 100)

On operation of the amplifier, if the fuses do blow, check all possible causes before replacing the fuses. If any doubt remains, contact Lyrita Audio for servicing.

Description

The **GM70 SET Mono** power amplifiers are single channel, medium power, tube amplifiers, offering superb reproduction of sound.

These amplifiers have to be operated using a preamplifier, which controls all signals coming to the amplifiers. Lyrita recommends using their DHT Line preamplifier.

The design is a single-ended triode tube amplifier, using the GM70 DHT power tube, running in pure Class A mode. There are two stages - the driver stage coupled through an interstage transformer to the output stage. The output stage uses a custom designed audio output transformer. No global feedback is used. All wiring is point-to-point.

Fixed bias is used for the output tubes. No user adjustment is required.

The power supply has an oversized transformer, to provide good regulation for the supply voltages. Solid state rectification is used for the output stage, and tube rectification for the driver stage. Each stage of the high voltage supply is independently filtered through chokes and special, high voltage, film capacitors. Individual filament transformers are used for low noise operation. A DC filament supply is used for the output tubes.

The GM70 SET is housed in a naturally finished solid sheesham cabinet. The design elegantly showcases the beauty of the tubes.

Connections

Power

Mains supply connection is through a detachable power cable with an IEC-type connector. The mains power switch is mounted on the front panel of the amplifier.

Signal

The input signal connection is made to the RCA socket on the back panel of the amplifier.

Speakers

The speaker output sockets accept banana jacks. The norm here is Red for signal and Black for ground. Maintain the colour code when connecting to the loudspeaker, so that the speakers operate in phase.

Installation

The amplifier should be placed as close to the loudspeakers as possible. This will allow the connections to be made with short speaker cables. It is advisable to keep the additional impedance seen by the amplifier as low as possible. The best way to do this is to keep the speaker cables short.

Good ventilation should also be provided around the amplifier. The tubes generate a fair amount of heat, and natural ventilation is necessary to dissipate this heat to the surroundings. The amplifier chassis will get warm, but should still be comfortable to touch.

Always place the amplifier on a firm, smooth surface.

Operation

Tube amplifiers need a load connected to their output. **Always connect the speakers before operating the amplifier.**

To power on:

- Flip the power switch UP to STANDBY. LED glows 'Red'.
- Wait 1 minute, for the tubes to heat up.
- Flip the power switch DOWN to OPERATE. LED glows "Green".
- Switch centre position is OFF.

When making or breaking any connections, always turn off the power to the amplifier first, so that no hum or transients are transferred to the speakers.

When sitting down to a listening session, it is a good idea to let the system warm up for a half-hour. This stabilizes the circuitry, and makes it sound better.