Pam

SOUND EQUIPMENT

The Pam Type 601A high quality transportable sound equipment consists of a compact 25-watt amplifier, operating from AC mains, moving coil microphone with stand, two separate high-power loudspeakers and all the necessary cable connectors. The whole equipment is designed to be readily transportable, simple to install, easy to operate and unfailingly reliable.

As with all PAM installations, such as the White City and Drury Lane—many of which have cost thousands of pounds—only the highest grade components are incorporated.

Examine the PAM Type 601A equipment carefully and you will appreciate the care and research which have gone into its design and manufacture. Its many refinements and the high standard of workmanship throughout explain its outstanding performance. By performance we mean its very fine natural reproduction, its inherent reliability, due to its mechanical robustness, and the large safety factor in all its electrical components.

The full output of 25 watts is equivalent to the combined volume of five ordinary radiograms and is ample for even large halls. The two wide range separate bass and treble tone controls and the smooth volume control enable the amplifier to meet the requirements of widely varying acoustic conditions. Whether it be for a cathedral, a restaurant, an outdoor swimming pool or a blanket factory, the PAM is the right equipment for the job.

With a simple record player or pick-up the PAM makes a magnificent record reproducer. It can also be used to amplify an ordinary radio set.

PRICE

Complete Type 601A Equipment comprising Amplifier, High-Fidelity Microphone and Stand and two 10 Watt Loudspeakers	**52 GNS.**
or with general purpose Microphone	**48 GNS.**

PRICES FOR ADDITIONAL LOUDSPEAKERS

10 watt speaker	**£8 0 0** *each*
5 watt speaker	**£7 15 0** *each*
2 watt speaker in wooden cabinet	**£5 5 0** *each*

General description

Amplifier

The chassis and cover are of metal, finished in maroon stove enamel. At each end are chromium plated handles for lifting. A sloping control panel makes for ease in the setting of the controls, each of which is clearly labelled. Domed feet prevent damage to tables, etc., on which the amplifier is stood.

Loudspeakers

The cabinets of the two 10 watt speakers are of metal, finished to match the amplifier. They are specially shaped so that they can be mounted in a variety of ways, thus projecting the sound in any desired direction.

Microphone

The microphone head is finished black and is carried on a telescopic chromium-plated floor stand with a polished black base fitting.

Technical Specification

Amplifier

Mains Voltage

The equipment is designed to operate from 50-60 cycle alternating current supply of any voltage from 200 to 250. A mains voltage adjuster is readily accessible at the back of the amplifier chassis. The total consumption is approximately 125 watts.

Power Output

25 watts audio.

Input

Two input sockets are provided, one for microphone and one for pick-up. The former is for a balanced 600 ohm line input and is followed by an amplifier gain of approximately 105 dB. It is suitable for low sensitivity moving coil or ribbon microphones. The pick-up socket has both magnetic pick-up and piezo pick-up connections, the input requirements of these two types being so different that this admittedly unusual feature is absolutely necessary for first-class reproduction from gramophone records. Ordinary records are intentionally lacking in bass and the two input circuits are specially designed to give full bass compensation.

Controls

There are four controls: Volume (incorporating mains on-off switch), treble, bass, and microphone-pick-up change-over switch. The volume and tone controls function on both microphone and pick-up. The range of the separate treble and bass controls is exceptionally great, which is invaluable not only for correcting the inadequacies of some gramophone records and speakers' voices, but also for combating the all too prevalent bad acoustics of public halls and other enclosures.

Amplifying Sequence

The amplifier contains six valves including one rectifier. The sequence is as follows :—

Valve 1. Mazda SP.41. Microphone pre-amplifier stage.
Valve 2. Mazda SP.41. Second microphone stage and first pick-up stage.
Valve 3. Mazda SP.41. Phase inverter operating on a novel principle which ensures a balanced output free from phase discrepancies at all frequencies.
Valves 4 & 5. Mullard EL.35's in push-pull Class AB.1 with semi-stabilised bias.
Valve 6. Mullard FW 4-500 rectifier.

Output Arrangements

The output of the EL. 35's is transformed to 100 volts for delivery to the loudspeakers. The object of this is to permit the standardisation of loudspeakers and to render possible the connection of a number of loudspeakers to the amplifier without the complication of having to calculate matching impedances.

The standard type No. 601A amplifying equipment is supplied with two 10 watt speakers, so that an additional 5 watt speaker can be added. Alternatively, five 5 watt speakers can be supplied, or any combination of speakers not exceeding 25 watts. The standard range of Pam speakers is 5 and 10 watt in metal cabinets and a 2 watt in a smaller wooden cabinet. So, another arrangement would be five 2 watt speakers, one 5 watt and one 10 watt. Two loudspeaker sockets are provided on the amplifier. They are five pin sockets having two pins for speech, one dummy and two for delivering 200-250 volts AC. The latter are only used when mains energised loudspeakers are employed. An important feature of the loudspeaker sockets is the safety contact. This automatically places an artificial load on the output valves when the loudspeaker plugs are withdrawn, and obviates the possibility of damage to the amplifier should the volume control be " up " with the loudspeakers disconnected.

Maintenance

Special care has been taken to afford the maximum of accessibility to all components. The power pack is an entirely separate sub-assembly which can be withdrawn from the amplifier chassis : withdrawal can be carried out with the minimum of disturbance to the wiring as it comprises the mains transformer, rectifier valve, reservoir condenser, fuse and voltage adjuster plate. To facilitate the examination of the underside of the chassis, feet are fitted so that the amplifier can be turned upside-down with the valves in place.

Microphone

High Fidelity

This is a moving coil instrument with a substantially level response from 40 to 15.000 cycles. Its sensitivity is 65 dB below 1 volt per dyne per sq. cm. The output is 600 ohms balanced to earth. It will afford the highest quality reproduction of both speech and music.

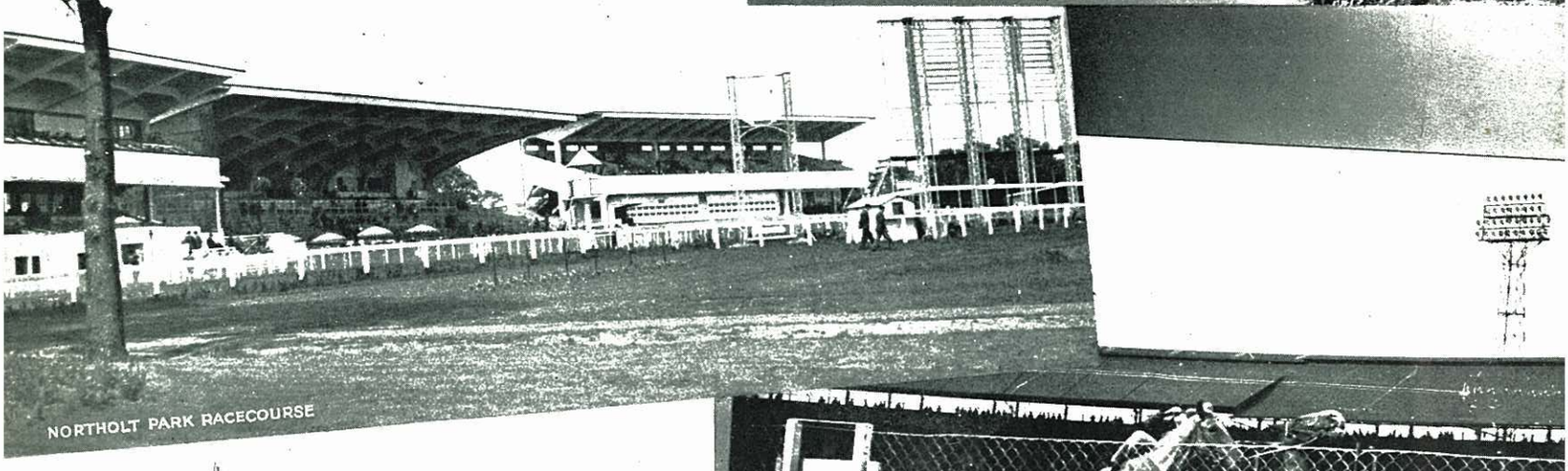
General Purpose

This is also a moving coil type but it has a less perfect frequency response and is considerably cheaper than the one just described. It is entirely satisfactory for announcement purposes and is quite suitable for dance band reinforcement and vocal refrain amplification.

Loudspeakers

These are 10" diaphragm. permanent magnet units. A 10-watt line transformer is incorporated with each, which in addition to the advantages stated under " Output arrangements " permits almost any length of wire to be used between loudspeaker and amplifier, without serious loss of power.

Facilities are provided in each cabinet for holding the various cables, microphone and stand.



The photographs above show just a few of the places where the beauty and realism of PAM reproduction can be enjoyed. Over twenty London theatres have been equipped with PAM installations. Many of Britain's historic castles and mansions enjoy music from PAM sound equipment, in fact the imposing list of PAM installations is far more eloquent than any words can be of the irresistible appeal of PAM reproduction.

Famous critics, musicians, conductors and producers have expressed their spontaneous appreciation of PAM high quality reproduction. The same quality of tone and realism of speech which have made Pamphonic famous over the last ten years are there in all their richness in the new PAM 601A sound equipment. ***Now*** is the time to invest in this new PAM instrument.

PAMPHONIC REPRODUCERS LTD ENGLAND