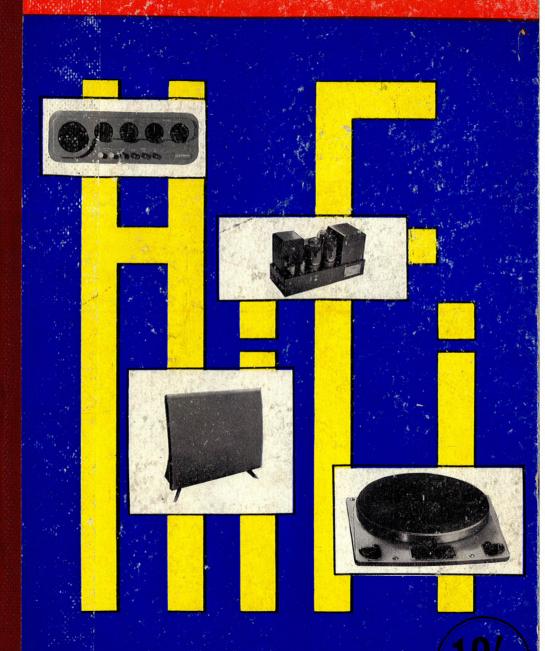
HI-FI YEAR BOOK



PICKUPS TUNERS

MOTORS.

TAPE RECORDERS

Hi-Fi Year Book

—— 1956 Edition -

Editor - - MILES HENSLOW

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Published by:

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FOREWORD

THIS Hi-Fi Year Book (1956 Edition) has been arranged, in sections, to cover the whole subject of High-Fidelity sound reproduction in its logical sequence, beginning with a history and ending with a peep into the future. Between these two extremes, are the chapters dealing with the various items of equipment, arranged in their order of appearance, from pickup to speaker, etc.

In each chapter, available equipment has been presented alphabetically, in directory form with relevant technical data. Where apparatus is illustrated, the picture page numbers are given. To increase the usefulness of this book, all advertisements are grouped in one section and indexed on page 136, and should be referred to for additional data. Prices in the editorial section are shown without Purchase Tax. While every effort has been made to ensure accuracy, no responsibility can be accepted for discrepancies.

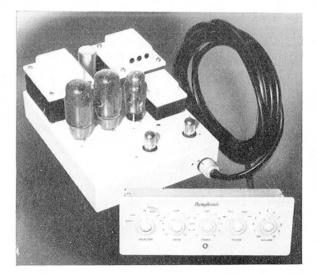
As this is the first edition of Hi-Fi Year Book, and is therefore an experiment in layout and arrangement, any criticisms and suggestions for the enlargement and improvement of future editions will be very welcome.

MILES HENSLOW

Hi-Fi GUARANTEE

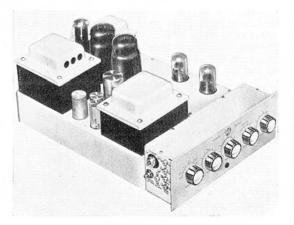
THE purpose of this Year Book is to take the subject of Hi-Fi to pieces, and to explain it in the most simple and understandable terms, and at the same time to provide as complete a survey as possible of all the best equipment available today on the British Market. Readers may accept, as a guarantee of quality, that no mention is made in this book of any piece of equipment that is not of really good standard, and that no advertisement is accepted from any manufacturer of components or instruments whose products are not up to the standard of "Hi-Fi", as it is understood and accepted in its true meaning, by the Trade as a whole, by the acknowledged experts of the day, and by the editorial and publishing office of Hi-Fi Year Book.

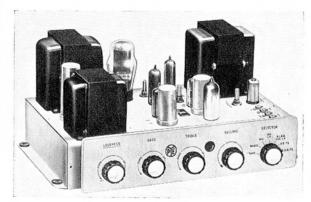
It is, of course, important to add that no implication of unworthiness is intended towards any manufacturers whose products may have escaped mention, or whose advertisements do not appear in these pages. The above guarantee is a positive one—not a negative one, and we can only repeat that those products which *are* mentioned, or advertised, may be bought with full confidence.



Pamphonic. Control Unit (1002a). Price £12 12s.; and Amplifier (1002), 25 watts. Price £29 8s.

Pye. Control Unit (H.F. 25a). Price £12 12s.; and Amplifier (H.F.25), 25 watts. Price £29 8s.





Pye. Amplifier type H.F. 5/8, 5 watts. Price £26 5s.

valves, N709 pentodes. Ultra linear. Output impedances, 15 ohms, or for 1, 2, or 3 3/5-ohm speakers. Price on application.

G.E.C. Control unit BCS 2415, and amplifier BCS 2416. (Photo page 62.)

Control Unit. Inputs, mic.; radio : pickup. Controls, selector switch for above, with 3 record equalising positions; volume; treble selector, with boost and cut in 7 steps; bass selector, with boost and cut in 7 steps, and with cut-off filters at 9, 7, and 5 K/cs.; treble rate cut, variable with boost and cut: presence control, continuously variable. Power supply for tuner.

Amplifier, Power output, 25 watts. Sensitivity, 103 mV for 25 watts. Output valves, KT 66. Output impedances, 15 ohms. Price, complete with interconnecting cables, The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2.

H.M.V. Control unit and amplifier. (Photo page 62), Model 3050 (for Model 3052).

Control Unit. Inputs, F.M.; A.M. radio; T.V.; aux.; pickup. Controls, selector switch for the above; equaliser switch, 5 positions; on/off; treble, with cut and boost; bass, with cut and boost; volume; filter, with cut at 5, 9, 13 and 20 Kc/s. Power supply outlet for tuners.

Amplifier (housed in 3052 speaker unit) Power output, 18 watts max. Sensitivity, 2.0 volts for 10 watts output. Output valves, KT 66. Price to be announced. The Gramophone Co. Ltd., Hayes, Middlesex, England.

"Point One" control unit and Leak. TL/10 amplifier. (Photo page 62.)

Control Unit. Inputs, pickup; tape, by jacks, for "record" and "Playback"; radio, with attenuator control. Controls, selector switch for the above, with 4 record equalising positions; volume; treble, with boost and cut; bass with boost and cut. Power supply outlet for tuner.

Amplifier. Power output, 10 watts. Sensitivity, 125 mV for 10 watts. Output valves, KT 61. Ultra linear. Output impedances, 4, 8 and 16 ohms. Prices: "Point One" control unit £10 10s.; amplifier £17 17s. H. J. Leak and Co. Ltd., Brunel Road, London, W.3.

Leak, "Vari-Slope" 2 control unit, and TL/12 amplifier. (Photo page 64.)

Control Unit. Inputs, pickup; radio; tape (jacks for "record and playback"); mic.; auxiliary. Controls, selector switch for the above, with 6 record equalising positions (10 positions in all); volume, with on/off; treble, with boost and cut; bass, with boost and cut; filter slope control, from 9, 7, 5 and 3 Kc/s.

Amplifier. Power output, 12 watts. Sensitivity, 148 mV for 12 watts. valves, KT 66. Output impedances, 2, 8, 16 and 32 ohms. Prices: "Vari-Slope" 2 control unit £16 16s.; TL/12 amplifier £28 7s.

Leak. TL/25a amplifier.

Output, 25 watts. Sensitivity, 148 mV for 25 watts. Output valves, KT 66. Output impedances, 2, 8, 16 and 32 ohms. £34 7s.

Note: Both Leak control units ("Point One "and "Vari-Slope" 2) can be used with all three amplifiers listed above.

* Master control unit Mk. 1 and Lowther. amplifier TP.10*. (Photo page 64.)

*

Control Unit. Inputs, tape: radio: auxiliary; mic. (tape outlet independent of volume control); pickup. Controls, selector switch for the above; record equalising switch with 5 positions; volume, with on/off; treble, with boost and cut; bass, with boost and cut.

Amplifier. Power output, 16 watts. Sensitivity, 1 volt for 16 watts. Power outlet for tuner. Output valves, EL.34 "Lowther linear." Output impedances, 0.95, 3.8, 8.5 and 16 ohms. Prices: Control unit £20: amplifier £40; complete £60.

*The TP.10 will in future be known as the Lowther "Linear 16."

Lowther. "Linear 10" amplifier. Power output, 10 watts. Sensitivity, 0.75 volt for 10 watts. Output valves, EL.34 "Lowther linear." Output impedances, 3.5 and 16 ohms. Power for tuner. Price £25.

Lowther. Master control unit Mk. 2. is similar in all detail to the Mk.1 unit described above, but possesses the extra facility of "tape playback" direct from the tape head. Price £24. Note: Either control unit can be used with either amplifier. Lowther Manufacturing Co., Lowther House, St. Marks Road, Bromley, Kent, England

Pamphonic. Control unit 1002a and amplifier 1002. (Photo page 66.)

Control Unit. Inputs, mic.; magnetic pickup; radio/tape. Controls, selector switch for above, with 3 record equalising positions; treble, with cut and boost; bass, with cut and boost; filter, switched to cut at 4, 7 and 12 Kc/s.; volume, with on/off. Power outlet for supplying tuner.

Amplifier. Power output, 25 watts. Sensitivity, 0.35 volt for 15 watts. Output valves, KT 66. Output impedances, 3.75, 6.6, 15 or 60 ohms. Prices: Control unit £12 12s.; amplifier £29 8s.; complete £42

Pamphonic. Amplifier type 1003. Controls and amplifier in one unit.

Inputs, mic.; radio; tape; pickup. Controls, selector for the above, with 3 record equalising positions; treble, with boost and cut; bass, with boost and cut; volume; power outlet for tuner; power output, 10 watts; output valves, 6AQ5; output impedances, 3.5 and 15 ohms. Price £28 7s. Pamphonic Reproducers Ltd., 17 Stratton Street, London, W.1.

Pye. Amplifier HF 5/8. Controls and amplifier in one unit. (*Photo page* 66.) Inputs, pickup; tape; mic.; radio. Controls, selector for the above, with 4 record

equalising positions; treble, with boost and cut; bass, with boost and cut; volume; loudness compensator. Power output, 5 watts. Sensitivity for 5 watts, tape and radio, 100 mV; mic., 4 mV; pickup, 20, 20, 18, 22 mV respectively for the four positions, at 1 Kc/s. Output valves, 6AQ12 or EL90. Output impedances, 15 and 4 ohms. Price £26 5s.

Pye. Control unit H.F. 25a, and amplifier H.F. 25. (*Photo page* 66.)

Control Unit. Inputs, radio (with attenuator control); pickup (with 5 matching plugs available); mic.; tape "in"; tape "out". Controls, selector for above, with 4 record equalising positions; treble, with cut and boost; bass, with cut and boost; volume, with on/off; filter, switched for cancel, 4, 7, and 12 Kc/s. cut. There is no power outlet for supplying extra units.

Amplifier. Power output, 25 watts. Sensitivity, 0.5 volt for 25 watts. Output valves, KT 66. Ultra linear. Output impedances, 3.75, 6.6, 15, and 60 ohms. Prices: control unit £12 12s.; amplifier £29 8s.; complete £42. Pye Ltd., Cambridge, England.

Quad 2. Control unit and amplifier. (*Photo page* 68.)

Control Unit. Inputs, radio; radio/mic.; pickup. Controls, push-button selection for above, and for record equalisation; volume,

with on/off; bass, with boost and cut; treble, with boost and cut; filter, switched for "cancel," 5, 7, and 10 Kc/s.; variable slope filter, 2 power outlets for tuners. Pickup matching by interchangeable plugs.

Amplifier. Power output, 15 watts. Sensitivity, 1.4 volts for 15 watts. Output valves, KT 66. Ultra linear. Output impedances, 7 and 15 ohms. Prices: control unit £19 10s.; amplifier £22 10s.; complete £42. Acoustical Manufacturing Co., Huntingdon, Hunts, England.

R.C.A. Control unit and amplifier. (*Photo page* 70.)

Control Unit. Inputs, magnetic pickup; crystal pickup; radio/tape; mic. Controls, selector switch for the above, with mixing facility for mic. with radio and tape; treble, with boost and cut; bass, with boost and cut; volume; filter, switched for level, 5, 7, and 10 Kc/s.; variable filter slope, with on/off. Power outlet for supplying tuner.

Amplifier. Power output, rated 12 watts. Sensitivity, 1.2 volts for 12 watts. Output valves, KT 66. Improved Ultra linear. Output impedances, 4, 7, and 15 ohms. Price complete £48. R.C.A. Photophone Ltd., Lincoln Way, Windmill Road, Sunbury-on-Thames, Middlesex.

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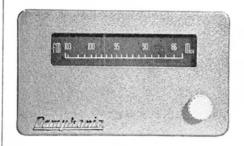
Rogers. R.D. senior control unit, and R.D. senior amplifier. (*Photo page* 70.)

Control Unit. Inputs, radio; mic.; pickup. Controls, selector switch for the above, with 6 record equalising positions; treble, with 3 cut, 2 boost, and level positions; bass, with 2 cut, 3 boost, and level positions; volume; switched high-pass filter, operating at 25 and 60 c.p.s.; switched low-pass filter, operating at 5, 9, and 20 Kc/s. Power outlets for radio tuners. (A modified control unit is now being manufactured, to replace this.)

Amplifier. Power output, 15/20 watts. Sensitivity, 1 volt for 15 watts. Output impedances, .95, 3.8, 8.5, and 15.2 ohms. Output valves Mullard EL 34. Ultra linear. Prices: control unit £14; amplifier £28.

Rogers. R.D. junior. Control unit and R.D. junior amplifier. (*Photo page* 70.)

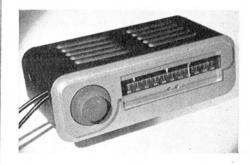
Control Unit. Inputs, radio; radio; tape (jacks for "record" and "replay"); pickup. Controls, selector switch for the above, with 4 record equalising positions; treble, with variable boost and cut; bass, with switched boost and cut; volume; filter, variable from 4.5 to 8.5 Kc/s. cut. Power outlet for tuner.



Pamphonic F.M. Tuner Price £12 12s. (plus P.T.)

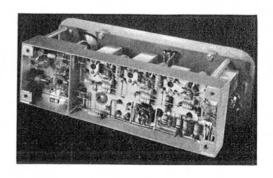
Pye F.M./A.M. Tuner Type H.F.T. III Price £21 19s. 8d. (plus P.T.)





Quad F.M. Tuner Price £21 (plus P.T.)

Quad F.M. Tuner with case removed to show layout



at 2 amps. Magic eye. Output 40 mV. Price £15 15s. (+ P.T.).

A.M. Tuner S4. Range 16-50; 195-550; 800-2,000 metres. Var. select. P/N 250v at 20 mA; 6.3v at 1 amp. Price £12 (+ P.T.).

A.M. Tuner S5. Range and other details as for S4. Price £16 (+ P.T.).

A.M. Tuner S6. Range as S4. P/N 250v at 30/40 mA; 6.3v at $1\frac{1}{2}$ amps. Price £22 10s. (+ P.T.).

A.M. Tuner S6BS. Six bandspread ranges: 13, 16, 19, 25, 31, and 41 metres; also 15-43; 43-140; 175-570 metres. Var. select. P/N as for S6. Price £33 (+ P.T.).

AM/FM Tuner, Type S5FM. Range (FM) 87-100 Mc/s.; (AM) as on tuner S5. Ratio det. P/N 200/250v at 40/50 mA; 6.3v at 2½ amps. Price £24 7s. 6d. (+ P.T.).

Dynatron Radio Ltd., The Firs, Castle Hill, Maidenhead, Berks, England. (*Photo page 84.*) *A.M./F.M. Tuner T10.* Range (F.M.) 88-100 Mc/s.; (A.M.) 13-48; 48-160; 185-575; 800-2,000 metres. Var. select. Price £43 15s. (+ P.T.).

F.M. Tuner FM1. Range 88-95 Mc/s. Switched pre-tuned spots for 3 B.B.C. progs. A.F.C. P/N 220v at 20 mA; 6.3v at 2.5 amps. Price £18 (+ P.T.).

Stratton & Co. Ltd. Birmingham 31, England. "Eddystone" 820 F.M. Tuner, with 3 switched pre-set spot frequencies for A.M., 2 in medium, and 1 in long wave-band. F.M. range 87.5- 100 Mc/s. Foster-Seely. Magic eye. S/P. Price £28 10s. (+ P.T.).

Jason Motor and Electronic Co., 328 Cricklewood Lane, London, N.W.2. (*Photo page* 84.) *F.M. Tuner*. Range 88-100 Mc/s. Ratio det. P/N 220v at 25 mA; 6.3v at 1.5 amps. Price £11 19s. 3d. (+ P.T.).

A.M./F.M. Tuner. Range (F.M.) 88-100 Mc/s; (A.M.) 195-560 metres. Ratio det. A.F.C. S/P. Price £20 12s. 6d. (+ P.T.).

H. J. Leak & Co. Ltd., 57 Brunel Road, London, W.3. (*Photo page* 84.)

F.M. Tuner. Range 88-100 Mc/s. Foster-Seely. Magic eye. S/P. Price £25 (+ P.T.).

Lowther Manufacturing Co., St. Marks Lane, Bromley, Kent, England. (*Photo page* 84.)

F.M. Tuner Mk. 2. Range 85-100 Mc/s. Foster-Seely. A.F.C. Audio tuning indic. P/N 250v at 30/35 mA; 6.3v at 2 amps. Price £22 (+ P.T.).

Pamphonic Reproducers Ltd., 17 Stratton Street, London, W.1. (*Photo page* 86.)

F.M. Tuner. Range 86-103 Mc/s. Ratio det. Magic eye. P/N 250v D.C. at 30 mA; 6.3v at 1.5 amps. Price £12 12s. (+ P.T.).

Pye Ltd., Cambridge, England. (*Photo page* 85.)

F.M./A.M. Tuner HFT 111. Range (F.M.) 87-100 Mc/s.; (A.M.) 183-564; 956-1,910 metres. Phase discrim. Magic eye. S/P. Prices: £25 10s. 8d., or chassis, £21 19s. 8d. (+ P.T.).

Rogers Developments (Electronics) Ltd., 116 Blackheath Road, London, S.E.10. F.M. Tuner. Provisional details: Foster-Seely. A.F.C. Price £17 10s. (+ P.T.).

Sound Sales Ltd., West Street, Farnham, Surrey, England. (*Photo page 88.*)

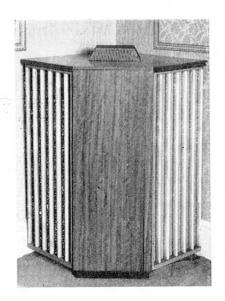
F.M. Tuner Mk. 2. Range 86-100 Mc/s. Foster-Seely. Calibrated tuning. Magic eye. P/N 230/250v at 30/40 mA; 6.3v at 1.5 amps. Price £15 (+ P.T.).

A.M. Tuner Mk. 2. Range 190-570; 800-2,000 metres. P/N 230v at 15 mA; 6.3v at 1.5 amps. Magic eye. Price £12 15s. (+ P.T.).

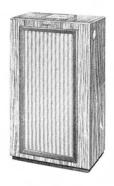
Technical Suppliers Ltd., 63 Goldhawk Road, London, W.12. (*Photo page* 88.)

"Empress" F.M. Tuner.
Mc/s. Foster-Seely. S/P. Magic eye.
Price £12 14s. 3d. (+ P.T.).

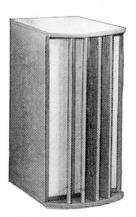




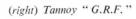
Rogers Corner Horn (with side louvres)

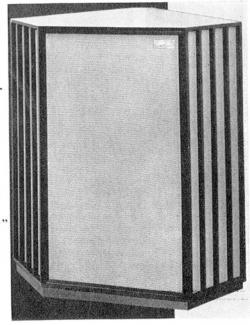


Pamphonic "Victor Senior"



(above) Sound Sales "Phase Inverter" Speaker





H.M.V. Model 3052. (*Photo page* 92). (Preliminary details). Total of 6 units Bass—3 units on baffle, operating down to 25 c.p.s. Middle—2 shielded cone electrodynamic units on baffle, for response up to 10 Kc/s. Treble—1 narrow ribbon in top front of cabinet for 10 Kc/s. upwards "into supersonic." Enclosure houses main amplifier. Price not yet announced. E.M.I. Ltd., Hayes, Middlesex, England.

Lowther. Lowther Corner Reproducer. (Photo page 92). T.P.1. (P.M. 3 in.). A fully horn-loaded twin-cone 8-in, unit of advanced design. Front of cone drives wide horn at ideal level. Back of cone drives folded bass horn using space under cabinet, bounded by corner of room as final section. The speech coil, tube, and small free-edged H.F. cone effectively horn-loaded by "stabiliser" to prevent ringing. H.F. response exceptional and distribution even over whole 90 deg. by shaped reflector, and absence of usual beam from cone. F.d. 21,000-22,000 gauss. Lowther Manufacturing Co., Price £96. St. Marks Road, Bromley, Kent.

Pamphonic Reproducers Ltd., 17 Stratton Street, London, W.1. (*Photo page* 94.) "Victor" speaker enclosure. Bass unit, 15 in. Flux density 16,000 lines. Power capacity, 15 watts. Treble unit, elliptical, with aluminium voice coil and former. The whole in enclosure with room matching switch. Impedance, 15 ohms. Price £57 15s.

Pye Ltd., Cambridge, England. "Concerto" speaker enclosure. With dual concentric unit. Bass, 12 in. unit. Flux density, L.F. gap, 10,000 gauss. Treble unit, pressure type. Flux density, H.F. gap, 15,000 gauss. Speech coils fed through crossover network, crossing at 1,700 c.p.s. Power capacity, 15 watts. Price £68 5s.

Rogers. Corner Horn. (*Photo page* 94). Vertically mounted 8-in. unit rear-loaded with folded horn, uses walls as final section. Conical reflector on axis gives 360 deg. H.F. distribution. Sound striking corner increases effective source area. Price, as illustrated and with Axiom 102, £32 5s. 2d. Rogers Developments (Electronics) Co. Ltd., 116 Blackheath Road, London, S.E.10.

Sound Sales. "Phase Inverter." (*Photo page* 94). Incorporates Sound Sales "Dual Suspension 12" unit in "Phase Inverter" cabinet. Drive unit F.d. 10,600 gauss. Gap flux 95,000 Maxwells. V.c.i. 15 ohms. Price complete £16 10s. Unit, £9 13s. 4d.

Sound Sales. "Tri-Channel" Speaker. (*Photo page* 92). Incorporates units for bass, middle and treble frequencies, driven by their respective amplifiers. Refer to amplifier section and photo on page 74. Sound Sales Ltd., West Street, Farnham, Surrey, England.

Tannoy. "Autograph." (*Photo page 94*), Forward facing 15-in. dual concentric, horn-loaded front and rear in cabinet of ample dimensions gives efficiency well above average. Effective source area varies with frequency giving excellent balance between extreme requirements. H.F. source at correct height and distribution even. Price £150 3s.

Tannoy. "G.R.F." Slightly smaller version of "Autograph," with same unit and very similar performance in all respects. Price £116 10s.

Tannoy. "York." (*Photo page* 96). Forward facing 15-in. concentric, in cornermounted well-damped reflex. Price £71 8s.

Tannoy. "Landsdown." (*Photo page 96*). Forward facing 12-in. concentric, in wall-mounted damped reflex. Price £68 5s. Tannoy Products Limited, West Norwood, London, S.E.77.

* * *

Vitavox. "Klipschorn" Reproducer. Folded corner horn using radiator from front only of 15-in. unit. H.F. from dispersive horn with S2 pressure unit, via 500 c.p.s. crossover. Price (with crossover) £145; without £135. Vitavox Ltd., Westmoreland Road, London, N.W.9.

Wharfedale. 3-speaker system. (*Photo page* 96). Forward facing 15-in. unit in sand-filled panel fitting corner provides large reflex enclosure. Top assembly houses horizontally mounted 8-in. and 3-in. units fed from 800 c.p.s. and 5,000 c.p.s. crossovers and level controls. Reflection from walls and ceiling gives excellent distribution and very wide effective source. Extreme bass very good. Drive units W15/CS. Super 8 C/S, Super 3. Price £73 10s.

Pamphonic

for outstanding equipment in the field of High Fidelity



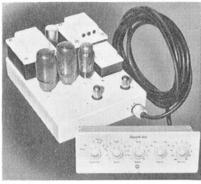
'VICTOR' LOUDSPEAKER

A 15-in, dia, permanent magnet Bass unit and special mounting of the Treble unit, eliminates beaming and gives wide Room angle diffusion. matching switch incor-441 in. high. porated. wide, 181 in. 24½ in. deep, finish in either African Mahogany Walnut Veneer with Old Gold metal grille.

10 watts Junior model also available.

AMPLIFIER 1002

Consisting of a main amplifier and pre-amplifier control unit, 1002A, with inputs for Radio, Tape, Microphone and Gram. This is a superb combination, capable of 25 watts continuous output. Six selector positions and separate Bass, Treble and Volume controls. Harmonic distortion—Approx. 0.05% at 15 watts 1 Kc/s. Frequency response 1 c/s. to over 100,000 c/s. Mains input—100 to 150 volts and 200 to 250 volts AC 50/60 c/s.



AMPLIFIER 1003

Designed to give high fidelity reproduction from a suitable Gram., Radio Tuner, Microphone or Tape source. Selector switch for six correction networks. Bass, Treble and Volume controls. Edge-lit panel.



The output of the amplifier is brought to the back, where there is a $3\frac{1}{2}$ ohm and a 15 ohm loudspeaker connection. Power output 8-10 watts.

* Remember this slogan



for sound - NATURALLY!

Write for illustrated leaflets of these and other equipment

PAMPHONIC REPRODUCERS LTD

17 Stratton Street, London, W.1.

Phone GROsvenor 1926