NOTE: Due to the 15% Import Surcharge certain prices in this catalogue have been increased. As the Surcharge is reduced, so will our prices. A Credit Note will be issued for the excess amount.

HOURS OF BUSINESS: MONDAY TO SATURDAY (THURSDAY 1 p.m.), 9 a.m. to 6 p.m.
OPEN ALL DAY INCLUDING SATURDAY.

TERMS OF BUSINESS:

Terms are strictly nett cash with order or C.O.D. (Monthly accounts can be arranged for approved organisations, including Educational establishments). All cheques, money orders, postal orders, etc., should be made payable to "Henry’s Radio Ltd." and crossed. Postage and packing charges should be included as indicated. Overseas orders are welcomed and packing and other charges will be quoted individually.

The prices shown in this Catalogue are subject to change without notice, all goods are offered subject to their availability and being unsold. Every effort has been made to ensure complete accuracy however no responsibility can be accepted for errors in prices descriptions or specifications.

Any shortages or damage in transit must be notified in writing immediately on receipt of goods quoting the receipt number, in addition any damage in transit must be reported to your local post office.

All returned goods for any reason whatsoever are sent at the risk of the senders. A separate letter must be enclosed with each parcel.

GUARANTEE. All goods supplied, unless otherwise stated, are guaranteed to be in perfect working order on delivery. Any goods which appear to be faulty must be returned immediately with full covering letter. Subject to test they will be replaced under Guarantee.

TRADE DISCOUNTS: Quotations will be given for enquiries on trade letter heading only. State items and quantities required.

EXPORTS: We can supply all advertised lines in small quantities or in bulk for Export. Enquiries invited for quotation on all stock items.

★ LET US QUOTE FOR COMPONENTS FOR YOUR CIRCUIT ★

COMPREHENSIVE CATALOGUE-FIFTH EDITION

(Copyright Reserved)

HENRY’S RADIO LTD FOR EFFICIENT AND RELIABLE SERVICE
NEW STOCK ITEMS

AS WELL AS NUMEROUS PRICE REDUCTIONS
THE FOLLOWING PAGES SHOW THE RANGE
OF NEW EQUIPMENT AND COMPONENTS
ADDED TO THIS NEW AND REVISED EDITION.

PAGES (ii), 6, 10, 23, 24, 26, 29, 30, 43, 48, 49, 57, 60, 66, 82, 83, 86, 87, 89, 90.

★ We are stockists for the following makes of Hi-Fi equipment

CARTRIDGES AND ARMS
LENCO
ORTOFON
SHURE
RONNETTE
DECCA
GOLDRING

RECORD PLAYER DECKS
GOLDRING-LENO
SUGDEN
PHILIPS
GARRARD
THORENS

AMPLIFIERS
LEAK
ROGERS
LINEAR
TRIPLETONE
QUAD

SPEAKERS
WHARFEDALE
GOODMANS

LET US HAVE YOUR ENQUIRIES FOR THESE FAMOUS MAKES—24 HOUR DELIVERY.

WATCH OUR ADVERTISMENTS IN "PRACTICAL WIRELESS", "RADIO CONTROL MODELS AND ELECTRONICS", "RADIO CONSTRUCTOR" "SHORTWAVE MAGAZINE" HI-FI NEWS "RSGB" "WIRELESS WORLD" AND "PRACTICAL ELECTRONICS" MONTHLY MAGAZINES.

SUPPLIERS OF ELECTRONIC EQUIPMENT AND COMPONENTS TO:

BRITISH AND OVERSEAS UNIVERSITIES,
ATOMIC ENERGY AUTHORITY
BRITISH AND OVERSEAS AIRLINES,
POLICE FORCES,
EDUCATIONAL AUTHORITIES,
BRITISH AND OVERSEAS GOVERNMENTS
MEDICAL AUTHORITIES.
PHOTO-GRAPHIC ESTABLISHMENTS
MANUFACTURERS AND DISTRIBUTORS
OF ALL TYPES OF EQUIPMENT.
GENERAL POST OFFICE
FORCES TRAINING CENTRES
RESEARCH ESTABLISHMENTS

ETC., ETC.

TRADE AND EXPORT ENQUIRIES WELCOMED
MACGREGOR
RADIO CONTROL EQUIPMENT

For all types of model Aircraft, Boats and Cars and other equipment requiring remote control. Models available include transmitters and receivers for CW and Tone. Circuit designs are all valve, valve-transistor or all transistor mounted on printed circuit panels. All models are for the 27 Mc/s. Radio Control Band.

★ CARRIER WAVE RECEIVER
Relayless output for actuators low resistance relays or small motors. Maximum loading 500mA. 3-Transistor plus valve design. Receiver voltages 22½ and 1½ volts. Actuator 6 volts maximum. Overall size 3½" x 2" x 1½". Weight 1¼ Oz.

PRICE KIT 70/- pp. 1/6
PRICE BUILT 90/- pp. 1/6

★ TERRYTONE II RECEIVER
All transistor tone receiver. Relayless output for Actuators. Small motors or low resistance relays. Maximum loading 500mA. 5-Transistor design. Receiver voltage 3 to 4½ volts, actuator voltage 1½ to 6 volts maximum. Size 3" x 2" x 1½". Weight 1¼ Oz.

PRICE KIT £5.19.6 pp. 1/6
PRICE BUILT £7.9.6 pp. 1/6

★ BASIC TRANSMITTER — CARRIER WAVE.
Single channel design for use with carrier wave receiver (See above). Voltages required are 85 to 135 volts and 1½ volts. Overall size 4" x 3½ x 2½".

PRICE KIT 59/6 pp. 2/-
PRICE BUILT 89/6 pp. 2/-

★ BASIC TRANSMITTER — TONE.
As above but tone modulated for use with Terrytone II and minimac receivers.

PRICE KIT 85/- pp. 2/-
PRICE BUILT £5.15.0 pp. 2/-

★ DE LUXE CW/TONE TRANSMITTER
Two transistor plus valve combined carrier wave and tone receiver suitable for all the receivers shown. Operates from 9 volts and 1½ volt batteries. Overall size 4½ x 4½ x 2½". (Note case shown is not supplied).

PRICE KIT £6.10.0 pp. 2/-
PRICE BUILT £8. pp. 2/-

★ METAL CASE with telescopic aerial suitable for any of above transmitters.
Size 8½" x 4½ x 2½"

PRICE 55/- pp. 1/6

★ MINIMAC RECEIVER
Single channel tone receiver for relayless operation. Supplied built and tested in a plastic casing. Features 5-transistors. Overall size 2½ x 1½ x 3½". Weight 1 Oz. Requires 3 to 4½ volts for receiver and 1½ to 6 volts for actuator, motor or relay used.

PRICE BUILT £8.19.6 pp. 1/6

★ MINIMAC RECEIVER
All transistor crystal controlled tone transmitter complete in case.

PRICE BUILT £10.19.6 pp. 2/-

★ TRANSISTOR/VALVE CARRIER WAVE and TONE transmitter in case.

PRICE BUILT £8.19.6 pp. 2/-

CONSTRUCTION BOOKLETS FOR THE KIT MODELS AVAILABLE SEPARATELY 2/-
10 Watt Transistor Hi-Fi Amplifier and Preamplifier

★ LOW NOISE HIGH GAIN TRANSFORMERLESS PUSH PULL DESIGN.
★ LOW POWER REQUIREMENTS
★ PRE-BUILT UNITS
★ MONO OR STEREO

Preamplifier and control unit

★ PRINTED CIRCUIT CONSTRUCTION

Front Panel Plate

★ 70dB Signal to noise ratio
★ Less than 0.3% distortion at 10 watts output.
★ Output 10 watts RMS music power or 20 watts peak

POWER AMPLIFIER

10 watts RMS output at 400 c/s. Distortion less than 0.3% at 10 watts. ±1 dB response 30 c/s to 20 kc/s with built in Roll off below 30 c/s and above 20kc/s. 60dB negative feed back. 100mV into 33 k ohm for 10 watts output. Available for 3/4 ohm and 15/16 ohm speakers. Two are used with our Stereo Preamplifier.

6-Transistor and Diode direct coupled low noise design on printed circuit panel 4 x 2½ inches. Output pair on 4 x 4 inch radiator.

PREAMPLIFIER AND CONTROL UNIT

8 Inputs ranging from 1.5 mV into 1 K ohm up to 250mV into 500 k ohm. Full equalisation and correction for LP and 78 records, crystal, ceramic and magnetic pickups, tape replay, crystal and dynamic microphones, all types of tuners etc. 4 Position low pass filter. Volume control, Input selector, Treble and bass controls. Maximum boost 13dB at 50 C/s and 15 kc/s, Full cut 15dB at 30 c/s and 15 Kc/s. Size 9 x 2½ inches.

★ Sufficient output to power two power amplifiers.

<table>
<thead>
<tr>
<th>10 watt 3 ohm 24 volt Power Amplifier</th>
<th>10 watt 15 ohm 40 volt Power Amplifier</th>
<th>Full Function Preamplifier (For either amplifier)</th>
<th>Mains Units (Optional) (Will run two complete equipments)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>£5.10.0</strong> pp. 2/6 (or Kit 99/6 p.p. 2/6)</td>
<td><strong>£5.19.6</strong> pp. 2/6 (or Kit £5.10.0 p.p. 2/6)</td>
<td><strong>£5.10.0</strong> pp. 2/- (or Kit 99/6 p.p. 2/-)</td>
<td><strong>69/6</strong> pp. 2/6 or <strong>59/6</strong> pp. 2/- for single power amplifier</td>
</tr>
</tbody>
</table>

★ BROWN AND GOLD FRONT PANEL PLATE 8/6d. ★

★ FULLY DETAILED BOOKLET WITH CIRCUITS FREE ON REQUEST ★
Transistor High Fidelity Equipment
LOW NOISE TRANSISTOR INTEGRATED
STEREO PREAMPLIFIER
AND CONTROL UNIT

- PREBUILT UNITS
- HUM FREE
- PROFESSIONAL QUALITY

Developed from the mono preamplifier described on page 2. Features four selected high gain low noise transistors. Each channel has frequency selective negative feed back for the first stage with eight inputs between 1.5mV and 300mV. The second stage is an adaptation of the baxandall tone control circuit with 13dB boost at 50c/s and 15 Kc/s and 15dB cut at 30 c/s and 15 Kc/s. High and low pass filtering is provided by negative feedback. Controls are input selector, balance, treble, bass and volume controls, supply on/off switch and mono stereo switch. Output 250mV peak for 1.5mV to 300mV inputs.

Designed for use with the 10 watt power amplifiers shown on page 2. The stereo preamplifier can be used with 9 to 12 volt batteries at 5mA or run from the power amplifiers.

- Equalised for pickups and tape replay
- 1.5mV sensitivity
- Overall size 9 x 3 3/4 x 1 1/2 inches
- 8 Inputs per channel
- Printed circuit design

NEW "PICK-UP MATCH"
Stereo Preamplifier Unit with dual impedance inputs. Matches 25 to 70mV, 1 to 2 meg ohm pick-ups such as Decca Deram to main preamp.
Also. Matches 2 to 10mV, 40 to 100Kohm pickups such as B.O., Shure, etc., etc., to main preamplifier.
Price built £10.19.6 pp. 3/6

- Brown and gold front panel plate
- 12/6 extra

- DETAILED LEAFLET FREE ON REQUEST -
VHF FM TRANSISTOR TUNER

(AS DESCRIBED IN DECEMBER 1963 EDITION OF RADIO CONSTRUCTOR)

★ FULL COVERAGE 87 TO 105 MC/S.

★ 5-TRANSISTORS AND 4-DIODES

★ AFC AND AVC

Features low loss pre-tinned printed circuit design with 10.7 Mc/s pre-aligned IF and geared tuning from 87 Mc/s to 105 Mc/s. Printed circuit panels are clearly marked with components designation for easy construction. Self-contained 9 volt power supply or external supply—Low consumption only 9mA at 9 volts. Supplied complete with front panel. All components are selected first grade types. Transistors used are (1) AF114, (3) AF115 or OC169.

Overall size in casing 3\frac{1}{4}\times2\frac{1}{4}\times4\text{ in.} or 3\frac{1}{8}\times2\times3\frac{1}{8}\text{ in} without casing.

DESIGNED FOR USE WITH VALVE OR TRANSISTOR AMPLIFIERS FOR PORTABLE OR DOMESTIC HI-FI USE

TYPICAL SENSITIVITIES

\begin{align*}
2/3 \text{ mV for} & \quad 1 \text{ microvolt aerial input} \\
30 \text{ mV} & \quad 10 \\
70 \text{ mV} & \quad 100 \\
\end{align*}

Average maximum output up to 1 volt peak.

Signal to noise ratio better than 50dB.

Approximate bandwidth 250Kc/s.

PARTS LIST—ALL PARTS SOLD SEPARATELY

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete set of 25-50% resistors</td>
<td>12/6</td>
</tr>
<tr>
<td>... 23 capacitors</td>
<td>20/–</td>
</tr>
<tr>
<td>Twin gang tuner</td>
<td>9/6</td>
</tr>
<tr>
<td>Complete set of transistors and Diodes</td>
<td>57/6</td>
</tr>
<tr>
<td>... coil set with IFTS</td>
<td>37/6</td>
</tr>
<tr>
<td>Set of printed circuit panels</td>
<td>17/6</td>
</tr>
<tr>
<td>Miscellaneous items</td>
<td>5/6</td>
</tr>
<tr>
<td>Front panel plate</td>
<td>6/6</td>
</tr>
</tbody>
</table>

TOTAL COST OF ALL PARTS

£6.19.6 pp. 2/–

★ HIGH QUALITY — LOW NOISE — HIGH SENSITIVITY RECEIVER FOR VHF FM BROADCASTS.

★ EXTRA ITEMS

COMPLETE CABINET ASSEMBLY WITH ALL NUTS BOLTS ETC. 20/– Extra.

★ FULLY DETAILED BOOKLET WITH CIRCUIT FREE ON REQUEST ★
1 HOUR TO BUILD

With Pre-Assembled Chassis and Printed Circuits

⋆ FULL TUNING OF MEDIUM AND LONG WAVE BANDS.

⋆ 6 - TRANSISTOR, 2 - DIODE PLUS VDR - ALL MULLARD.

⋆ DOUBLE TUNED IFTS.

⋆ PERMEABILITY TUNING WITH SMOOTH GEARED DRIVE.

⋆ PUSH - PULL CAR FILLING OUTPUT

⋆ PROFESSIONAL APPEARANCE.

⋆ PUSH-BUTTON WAVECHANGE.

⋆ 12 VOLT POSITIVE EARTH OPERATION FROM CAR BATTERY.
  (Or from 2-6 volt dry batteries).

⋆ ATTRACTIVE CABINET OVERALL SIZE 7 x 5 x 2 INCHES TO FIT ANY TYPE OF VEHICLE.

THE

“ROADSTER”

TOTAL COST TO BUILD £8-19-6 p.p. 3/6

- 7 x 4 inch high flux speaker to match complete with baffle and car fixing kit 20/- Extra

- 3-section Telescopic Arial, one hour fixing. Chrome finish. Complete with lead and plug 19/6
  or Fully disappearing type 35/-

- Miniature Soldering Iron Antex 29/6

- ALL PARTS FULLY GUARANTEED AND COVERED BY AFTER SALES SERVICE.

- VALUE FOR MONEY WITH OUTSTANDING QUALITY AND PERFORMANCE

- CIRCUIT AND DETAILS ON REQUEST

FIRST AND BEST AND UNBEATABLE
CONVAIR

NEW DESIGN HIGH PERFORMANCE PORTABLE TWO WAVE BAND PUSH - BUTTON RADIO

★ LATEST PUSH-BUTTON DESIGN
★ QUALITY PUSH PULL OUTPUT
★ FULL TUNING ON MEDIUM AND LONG WAVE BANDS
★ 6-TRANSISTORS - 2-DIODES.

PROFESSIONALLY DESIGNED PRINTED CIRCUIT CONSTRUCTION USING SELECTED MULLARD AND A.E.I TRANSISTORS. DOUBLE TUNED IFT'S—8 INCH DUAL WAVE BAND FERRITE AERIAL—GEARED SLOW MOTION HORIZONTAL TUNING—LARGE 5 INCH SPEAKER WITH OVER 700 mW PUSH-PULL OUTPUT—PUSH-BUTTON SELECTION OF WAVE BANDS—CAR AERIAL SOCKET.

ATTRACTIVELY STYLED COVERED CABINET WITH CLEARLY MARKED STATION DIAL—SMART CARRY HANDLE AND CAREFULLY FINISHED APPEARANCE.—DEFINITELY THE PICK OF THE PORTABLES. GUARANTEED RECEPTION OF MEDIUM AND LONG WAVE STATIONS AT HOME AND ABROAD. AMAZING SENSITIVITY ON BOTH WAVE BANDS.

PLAINLY MARKED PRINTED CIRCUIT PANEL AND FULLY DETAILED INSTRUCTIONS. ONLY FIRST GRADE COMPONENTS ARE USED. SUPPLIED WITH FACTORY ASSEMBLED TUNING DRIVE AND WAVE CHANGE ASSEMBLY.

★ DETAILED LEAFLET WITH CIRCUIT ON REQUEST

TOTAL COST OF ALL PARTS £7-19-6
(Batteries 2-PPI or VTI 6/- Extra) PP. 3/6

★ LOW PRICE WITH OUTSTANDING PERFORMANCE AND VALUE
★ ALL PARTS AVAILABLE SEPARATELY
★ FULL AFTER SALES SERVICE AND GUARANTEE

● Available in Dark Blue or Red finish with trimming

★ FOLLOWING A LONG LINE OF TRADITION FOR QUALITY AND VALUE ★
New! REGENT 6 MEDIUM AND LONG WAVE POCKET RADIO

- Full tuning on medium wave and long wave bands.
- Push-pull "clear tone" output.
- Professional printed circuit design.
- Geared tuning for easy station selection.
- Case colours cream with blue or red.

Amazingly clear reception for a pocket radio with terrific sensitivity on both wave bands. Radio Luxemburg and Radio Caroline are loud and clear. Easy to build with complete assembly instructions.

- All parts sold separately and fully guaranteed.
- Full after sales service.

Quality design and performance — value for money.

TOTAL COST TO BUILD 85/- pp. 2/6
(BATTERY 2/6, MATCHING EARPHONE 5/-)

12 VOLTS TO 230/240 VOLTS

DC TO AC CONVERTOR

- Uses 2-power transistors type XC141 in transformer inverter circuit. Runs from 12 volts DC i.e. car battery, producing 230 volts AC up to 15 watts (or up to 65mA).

Ideal for journeys, camping etc., where car battery is only source of voltage. Suitable for electric razors or any mains unit requiring 15 watts maximum.

COMPLETE KIT OF PARTS 62/6 pp. 2/-

(CIRCUIT MANUAL SEPARATELY 9d.)

SIZE 4½ x 3 x 2 INCHES.

- Size 5 x 3 x 1½ ins.

- Circuit and details free on request.

- A Repanco Design.
SIZE
ONLY 6 x 2½ x 2 INCHES

--- Real value and Performance ---

- FULL TREBLE, BASS AND VOLUME CONTROLS
- 40c/s TO 20kc/s ±3dB RESPONSE
- INPUTS FOR CRYSTAL AND MAGNETIC PICKUPS,
  MICROPHONES, RADIO TUNERS, MIXER ETC.
- MAINS OR BATTERY OPERATED
- 9/12 VOLT OPERATED FOR 3 TO 5 OHM SPEAKERS (mains unit 49/6 extra)

BUILT AND READY TO USE
£5-19-6

★ IDEAL FOR ALL BATTERY OR MAINS RECORD PLAYERS AND RADIOGRAMS. PORTABLE OR DOMESTIC EQUIPMENT.
★ 4 WATTS PEAK OUTPUT — BETTER PERFORMANCE THAN VALVE DESIGNS OF TWICE THE PRICE.

★ SEE PAGES 46/72/75 FOR RECORD DECKS AND SPEAKERS ★
NEW RANGE OF PORTABLE
QUALITY IN SMALL PACKAGES

★ 4 WATT
New 6-transistor and rectifier design on printed circuit. Overall size only 2½ × 2 × 2 inches. Operates from 12 to 18 volt supplies at 200mA maximum. Output to 3 or 50mm speakers. Sensitivity 2/3mV into 1K ohm for 3 to 4 watts output using 12 volt supply. Response 30c/s to 15Kc/s. Push-pull transformerless design with exceptionally low distortion and high gain.

Price Built 79/6 pp. 1/6 Or Kit 69/6 pp. 1/6
Peak output 6 to 8 watts.

★ 1½ WATT
Printed circuit 6-transistor and rectifier design. Features push-pull output to 3 to 5 ohm speakers. Operates from 9/12 volt supplies. Sensitivity 3 to 5mV for full output. Overall size 2½ × 2 × 2 inches. Sensitivity 3 to 5mV (into 1K ohm) for full output. 150mA maximum. Overall size 2½ × 2 × 2 inches.

Price Built 65/- pp. 1/6 Or Kit 57/6 pp. 1/6
Peak output 2 to 3 watts.

USE IN PAIRS FOR STEREO

★ 1½ WATT VERSION ★ 4 WATT VERSION

NOW FROM STOCK

TRANSPORTER
POWER AMPLIFIERS

- Overall Size 2½ × 2 × 2 ins.
- Transformerless high gain distortion free designs.
- Ideal for tuners, record players, loud hailers, tape replay etc., or any application requiring a quality amplifier.
- Can be used with pre-amplifiers of pages 2, 4 and 12. For mono or stereo. One preamp can be used to drive two amplifiers.
- Detailed leaflet with circuit and details on request.

TSL — GORLER AMPLIFIERS

★ 1 Watt 6 volt 92/6 pp. 1/6
(See Page 19 For Details)
Also TSL Audio Heart 1 watt. Kit 52/6 Built 59/6

★ 1½ Watt 12 volt (Negative Earth) 97/6 pp. 1/6

★ 2 Watt 9 volts (Type 324-007)

Price £5.2.6

★ 2 Watt 12 volts (Type 324-0013).
4-transistor design as above. Same size, same response and sensitivity.

Price £5.7.6

Audio Heart

- Conventional transformer coupled designs
- Ideal for tuners, Intercomms, Record players etc. etc.
The MINIGRAM

TRANSISTOR PORTABLE RECORD PLAYER

OFFERED AT HALF PRICE!

★ Features 4-Transistor printed circuit 1 watt amplifier with push-pull output; 5\times3 inch high flux speaker; Low current governed turntable motor with crystal pickup. Built into attractive two tone moulded cabinets size 8\times8\times4 inches.

★ Plays 45 rpm records with a pleasing tone. Fitted into attractive cabinet of modern design.

★ Sold as three assembled units with less than 30 minutes interconnection work required.

★ Runs from 9 volt battery PP9, VT9 or equivalent, readily available.

Made by well known British Manufacturer to sell at more than twice the price.

★ ORIGINAL VALUE £8.19.6 ★

TOTAL COST 79/6 pp. 5/- (Battery 3/9d. extra)

★ ALL UNITS SOLD SEPARATELY ★

★ Ready built amplifier with volume control and speaker 35/- pp. 2/-

★ Starr Turnable and pickup (Ready assembled) 39/6 pp. 2/6

★ Two tone moulded case (Ready assembled) 5/- pp. 2/-

IDEAL GIFT FOR ANYONE — A PLEASURE TO OWN AND USE

★ ETCH YOUR OWN PRINTED CIRCUITS ★

A complete Kit with full instructions for etching printed board to your own circuit designs. Supplied with all necessary chemicals, cleaners, dishes and brush. Fully detailed instructions and three copper clad boards. Size 6 \times 3 in.

19/6 p.p. 1/6

★ SPARE BOARDS FOR ETCHING ★

Size 6 \times 3 in. 1/9 each p.p. 6d.

Size 5\frac{1}{2} \times 6\frac{1}{2} in. 3/6 each p.p. 6d.

FROM STOCK WE CAN SUPPLY MOST OF THE COMPONENTS USED ON CIRCUITS IN RADIO MAGAZINES AND BOOKS. LET US QUOTE FOR YOUR CIRCUIT.
New single stage transistor preamplifier. Features 8-switched inputs for crystal/ceramic/magnetic pickups, crystal/dynamic microphones, valve/transistor tuners, tape replay etc. Sensitivity 1.5mV up to 300mV. Response ±1dB 30 c/s to 30 kc/s. Fitted volume control and top cut control. Works from 9 volts at less than 1⁄3 mA. Designed for use with any amplifier, valve or transistor. Matches our 10 watt power amplifier exactly. Built in resistors to enable the preamplifier to run from 24 or 40 volt amplifier supplies. Overall size 5×2 1⁄2 inches. Any number can be used with outputs paralleled to form high performance mixers. Ideal for Public Address Systems, for microphones, pick-ups. Sufficient output to drive one or two 10 watt amplifiers (page 2) or 11⁄2 watt or 4 watt amplifiers (page 10).

DETAILS ON REQUEST

MARTIN RECORDAKITS

TAPE PREAMPLIFIERS

★ FOR USE BETWEEN A TAPE DECK AND EXISTING AMPLIFIER ★

This Martin Pre-amplifier Recordakit enables you to add a tape-recording deck to any amplifier system with a minimum of cost and trouble. Designed for use with the well-known Collaro 3-speed Tape Deck, and available for two or four track operation. Includes valves, "magic eye", transformers and everything down to the last screw. Amplifier section supplied assembled and tested on printed circuit board.

**Output:**
400 mV into 10,000 ohms.

**Input:**
Microphone Socket—3 mV into 1⁄2 megohm.
Radio/Gramophone—400 mV into 1 megohm.

**Frequency Response:** (whole system)
At 31⁄2 in. and 71⁄2 in. per second over mic. input/recording/play/output—40/14,000 c/s ±2 dB.

Kits are complete with easy to follow instructions.

Due to the special characteristics of tape recording and play-back heads, it is impossible to connect them directly to normal types of amplifiers such as are used for gramophone pick-ups and radio tuners. Therefore, if you want to add tape facilities to your already existing equipment, you must have a special preamplifier between the deck you are going to use and the amplifier you already have in use. In this way, it becomes possible to have a complete record-playing, radio and tape-recording assembly for remarkably little extra outlay, particularly as MARTIN RECORDAKITS are supplied for you to build yourself. This saves you money, gives you the satisfaction of doing the job yourself and it is so easy that anyone can do it without previous experience or the need for any but the simplest of home tools.

★ FOR COLLARO STUDIO DECK ★

**Kit 8319CP** for 2 track operation
inc. valves.
8 GNS. p.p. 2/6

**Kit 8319-4 CP** for 4 track operation
inc. valves.
9 GNS. p.p. 2/6
BUILD A QUALITY TAPE RECORDER

FOR 'COLLARO STUDIO' DECK
TWO TRACK AND FOUR TRACK
THREE SPEED MODELS

Enables a three speed high fidelity tape recorder to be built with the following facilities:


The amplifier has three watts undistorted output and the complete recorder can be used as a straight high fidelity amplifier for records, etc. Frequency response at 7½ per second 80-12,000 c/s ± 3 dB. At 1½ per second (slow speed) a 7½ reel of double play tape will give up to 8 (or 16) hours playing. Input sockets for use with microphone, radio and pick-up, etc. External speaker socket.

Every Martin Recordakit is individually tested before leaving the factory, and includes easy to follow, step by step instructions. Each kit is complete down to the last screw and when built, your Martin Recordakit is ready to take all standard accessories produced for the modern tape recorder to provide endless hours of entertainment.

(1) MODEL 'C' AS DESCRIBED ABOVE
Amplifier 8311A assembled and tested with six BVA valves, controls, switches, transformers, knobs and full instructions for 2-track operation.
Price £11.11.0 pp 2/6

(2) COLLARO STUDIO DECK
Two-track, three motors.
Price £10.10.0 pp 5/-
(See page 71 for full description)

(3) Smart two-tone leatherette covered wooden case and 9½ x 5½ high quality speaker. Type 6659-V to take Kit model 'C' or model 'D'. (As illustrated)
Price £5.50 pp 3/6

<table>
<thead>
<tr>
<th>Items 1, 2 and 3 Purchased As one parcel</th>
<th>£26 pp 8/6</th>
</tr>
</thead>
</table>

(4) MODEL 'D' AS DESCRIBED ABOVE
Amplifier 8311A assembled and tested with valves, controls, switches, instructions, etc., as 'C' but for 4 track operation.

Price £12.12.0 pp 2/6

(5) COLLARO STUDIO DECK
Four track
(See page 71 for full details)

Price £13.19.6 pp 5/-

(6) Cabinet as item (3) above
Price £5.50 pp 3/6

<table>
<thead>
<tr>
<th>Items 4, 5 and 6 Purchased As one parcel</th>
<th>PRICE £30</th>
</tr>
</thead>
</table>

PORTABLE CABINET WITH COLLARO STUDIO DECK AND AMPLIFIER

You can build your RECORDAKIT into its own Cabinet (as above) or into your existing RecordPlayer/Radiogram Cabinet

FULL RANGE OF TAPE ACCESSORIES AND MICROPHONES IN STOCK

(Actual kit)

The high quality amplifiers are assembled on printed circuit boards, each complete with BVA valves and individually tested. NO PREVIOUS SKILL OR KNOWLEDGE IS REQUIRED TO ASSEMBLE THE TAPE RECORDER which, when built, will be found to be equal to the very best of its type. Even the wire leads are attached at one end to make wiring simpler.

Martin Tape Recorders can be used with any modern crystal microphone, tuner or gramophone pick-up which connects via standard jack-plug into the socket provided.

Fully detailed Leaflet on Request
UNIT 1. Single transistor input selector unit. Inputs for pickups, tuner, tape and microphone. Size 3½ x 3 inches. For use with units 2 or 4, 9 to 15 volt operated.

Price 47/6 pp. 1/6

UNIT 1A. Stereo add on unit for conversion of unit 1 to stereo.

Price 47/6 pp. 1/6

UNIT 1S. Complete stereo version of unit 1.

Price 95/- pp. 2/-

UNIT 2. Preamplifier with master volume control. For use with units 1 or 3. Overall size 2½ x 2½ inches.

Price 37/6 pp. 1/6

UNIT 2A. Add on Unit for Unit 2 for stereo.

Price 42/6 pp. 1/6

UNIT 2S. Complete stereo version of unit 2.

Price 75/- pp. 2/-

UNIT 3. Three channel mixer, 3-transistor, 3-controls. Plug in adaptors for impedance matching, i.e., tape pickup, microphone, tuner etc. for use with units 2 or 4. Overall size 6½ x 2½ inches.

Price 79/6 pp. 2/-

UNIT 3A. Add on Unit for Unit 3 for stereo.

Price 92/6 pp. 2/-

UNIT 3S. Complete stereo version of unit 3.

Price £7.19.0 pp. 3/-

(Plug in adaptors 8/6 each. Please state type of inputs required.)

UNIT 4. Preamplifier and tone control unit. Single transistor, separate treble, bass and volume controls. Overall size 6½ x 2½ inches. For use with unit 1 or 3. 9 to 15 volt operated.

Price 62/6 pp. 2/-

UNIT 4A. Add on Unit for stereo.

Price 75/- pp. 2/-

UNIT 4S. Complete stereo version of unit 4.

Price £6.5.0 pp. 3/-

UNIT 5. Power amplifier. 6-transistors with 10 watts push-pull output. Operates from 24 volt supply. (Unit 6). Output to 3 ohm speaker.

Price £5.12.6 pp. 2/6

UNIT 6. Provides 24 volt power supply from standard mains input for above units.

Price 52/6 pp. 2/6

UNIT 7. 10 watt 15 ohm version of Unit 5. Operates from 40 volt supply (Unit 8). For use with all above preamplifiers.

Price £6.12.6 pp. 2/6

UNIT 8. 40 volt mains unit for use with 15 ohm amplifier.

Price 55/- pp. 2/6

FRONT PANEL PLATES

<table>
<thead>
<tr>
<th></th>
<th>For Units 1 Plus 2</th>
<th>6/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
<td>8/6</td>
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<tr>
<td>12S</td>
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<td>10/6</td>
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<td>14S</td>
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<td>32S</td>
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<td>12/6</td>
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<tr>
<td>34</td>
<td></td>
<td>14/-</td>
</tr>
<tr>
<td>34S</td>
<td></td>
<td>15/6</td>
</tr>
<tr>
<td>(Also stereo balance control) 11/- 9d.</td>
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</table>

Unit 5 and Unit 7.

Unit 6 and Unit 8.
WEYMOUTH (Weyrad)  MEDIUM AND LONGWAVE PRINTED CIRCUIT 6-TRANSITOR RADIO

| Item | Description | Price
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>RA2W MW/LW Ferrite Aerial with Car Aerial Coil</td>
<td>12/6</td>
</tr>
<tr>
<td>b.</td>
<td>Coil Set: P50/1ACC: 2-P50/2CC: P50/3CC</td>
<td>20/- set</td>
</tr>
<tr>
<td>c.</td>
<td>LDFT4, Driver Transformer</td>
<td>9/6</td>
</tr>
<tr>
<td>d.</td>
<td>PCA1 Printed Circuit Board</td>
<td>9/6</td>
</tr>
<tr>
<td>e.</td>
<td>208+176pf Tuner</td>
<td>8/-</td>
</tr>
<tr>
<td>f.</td>
<td>Set of Transistors and Diode, OC44, 2-OC45, OB1C1, 2-OB81, OA81</td>
<td>29/6 Set</td>
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<td>g.</td>
<td>Alternative set of Edison Sw</td>
<td>27/6</td>
</tr>
<tr>
<td>h.</td>
<td>5K Potentiometer with D.P. Switch</td>
<td>4/6</td>
</tr>
<tr>
<td>i.</td>
<td>3 pole 3 way Switch</td>
<td>3/-</td>
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<tr>
<td>j.</td>
<td>2-30pf Trimmers</td>
<td>9d each</td>
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<tr>
<td>k.</td>
<td>Wire and Sleeveing</td>
<td>1/-</td>
</tr>
<tr>
<td>l.</td>
<td>VT1 Battery and Plug</td>
<td>6/6</td>
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WEYMOUTH (Weyrad)  MEDIUM AND SHORT WAVE PRINTED CIRCUIT 6-TRANSITOR RADIO

| Item | Description | Price
<table>
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<tr>
<td>l.</td>
<td>RA2W/4 MW/SW Ferrite Aerial</td>
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<td>2.</td>
<td>Coil Set: P50/1A: P90/1A5: P71: P72: P50/3V</td>
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<td>3.</td>
<td>LDFT4, Driver Transformer</td>
<td>9/6</td>
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<td>4.</td>
<td>PCA2, Printed Circuit Board</td>
<td>9/6</td>
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<td>5.</td>
<td>Tuning Condenser, 208+176pf Fitted Trimmers</td>
<td>9/6</td>
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<td>6.</td>
<td>Trimmers, 2-1.5 to 8pf</td>
<td>9d each</td>
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<td>7.</td>
<td>Set of 6 Transistors and 2 Diodes: (3) AF117, OB81: 2-OB81 OA70: OA70</td>
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<td>8.</td>
<td>5K Potentiometer with D.P. Switch</td>
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<td>9.</td>
<td>Wavechange Switch 4 pole 2 way</td>
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<td>10.</td>
<td>VT11 Battery and Plug</td>
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<tr>
<td>11.</td>
<td>Wire and Sleeveing</td>
<td>1/-</td>
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</tbody>
</table>

PRACTICAL WIRELESS—OSMOR

COMPLETE SET OF PARTS 7/19.6.

P1 PW/FRI Dual Wave Ferrite Aerial Assembly (Blue Spot) | 8/6
P2 PW/01 Oscillator Coil PW/2s 1st and 2nd IFT’s PW/3 3rd IFT | 20/- set
P3 PW/DT Driver Transformer | 8/-
P4 PW/OT Output Transformer | 8/-
P5 Matched Set of 6 Newmarket Transistors and Diode 25/- | 29/6 set
P6 208x176pf Tuning Condenser | 8/-
P7 (3) Single 60pf Trimmers (1/- each) | 3/-
P8 Sub-Miniature Condensers (5) 0.04mf | 9d each
(3) 0.01mf | 6d each
200pf: 330pf: 56pf: 18pf | 12/-
10mf: 50mf: 2mf: 30mf | 2/- set
100mf 12v | 2/-

MEDIUM AND LONG WAVE 6-TRANSISTOR POCKET/PORTABLE

P9 SK Control with Switch (VC 1545) | 7/6
P10 Resistors
(2) 10K: (2) 470ohm: (2) 2-9K: (2) 1K: (1) 660K: (1) 8-2K: (2) 390ohm: (1) 1K: (1) 50K: (1) 680ohm: (1) 2K: (1) 4-7K: (1) 33K: (1) 6-8K: (1) 150ohm: (1) 4.7 ohm
P11 1 pole 2 way x Wavechange Switch | 2/-
P12 2 inch 3 ohm Quality Speaker | 15/-
P13 Attractive Moulded Two Tone Cabinet with Dial and Fittings as illustrated on page Size: 54x33x2 | 12/-
P14 PW/PC Printed Circuit | 7/6
P15 Nuts and Bolts, Bracket, Wire Battery Clips, etc. | 3/-
P16 T6004 or PP49 Volt Battery | 2/-
P17 Circuit and Booklet | 1/6

★ ALL PARTS IN STOCK FOR EVERY PW TRANSISTOR DESIGN—LET US QUOTE ★
FM AND AM/FM TRANSISTOR TUNERS

- A NEW RANGE OF BATTERY OPERATED PREBUILT AND ALIGNED EQUIPMENT FOR THE CONSTRUCTION OF HIGH FIDELITY TRANSISTOR FM OR AM/FM OR STEREO FM TUNERS. SENSITIVITY AND QUALITY EQUAL IN PERFORMANCE TO THE BEST VALVE DESIGNS. IDEAL FOR FEEDING VALVE OR TRANSISTOR HI-FI AMPLIFIERS OR FOR PORTABLE EQUIPMENT USE AMPLIFIERS OF PAGE 51. FULL DETAILS ON HOW TO USE THESE UNITS CAN BE FOUND IN A NEW FM BOOK NUMBER 184.

PRICE £2.6 Post Free

☆ FM RF TUNING HEART MODEL 312-0002. (FIG. A.)
TWO TRANSISTOR TWO DIODE RF AMPLIFIER AND MIXER STAGE.
TUNING RANGE 87 TO 103 MC/S, 10.7MC/S IF OUTPUT. OVERALL POWER GAIN 24dB. OVERALL SIZE 3½ x 1½ x 1½ INCHES. FEATURES 5½ TURN WORM DRIVE. FULL AFC AND AGC.

PRICE £5.12.6 (Inclusive of P. Tax) Post Free

☆ HIGH GAIN FM RF TUNING HEART (FIG. A.)
MODEL 3120029 OR 3120015 OR 3120016.
AS ABOVE BUT FITTED WITH MESA TRANSISTORS. OVERALL POWER GAIN 29dB.

PRICE £5.19.6 (Inclusive of P. Tax)
POST FREE

☆ 3-STAGE FM 10.7MC/S IF STRIP MODEL 322-0009. (FIG. B.)
THREE TRANSISTOR THREE DIODE HIGH GAIN 10.7MC/S IF STRIP AND DESCRIPTOR STAGE. FEATURES 300K/C/S WIDE BAND AMPLIFIER WITH 40dB GAIN. FULL AGC AND AFC. OVERALL SIZE 2½ x 4½ x 1 INCH SENSITIVITY 90μV. AFC PULL IN + 350K/C/S.

PRICE £6.6.0 Post Free

☆ 3-STAGE AM/FM IF STRIP MODEL 322-0008 (FIG. C.)
THREE TRANSISTOR FIVE DIODE 10.7MC/S AND DESCRIPTOR AND 455KC/S IF STAGES. SENSITIVITY 150μV ON FM AND 20μV ON AM BANDWIDTH 300KC/S FM AND 9KC/S AM. FULL AFC AND AGC FOR FM AND AGC ON AM. OVERALL GAIN 50dB. AFC PULL IN + 350 K/C/S. SIZE 2½ x 5 x 1 INCH. CAN BE USED WITH FM RF TUNER AND MW, LW AND SHORT WAVE TUNERS AS UNIT 1 ON PAGE 54.

PRICE £9.17.6 Post Free

☆ 4-STAGE FM 10.7 MC/S IF STRIP MODEL 322-0005 (FIG. D.)
FOUR TRANSISTOR THREE DIODE 10.7MC/S IF AND DESCRIPTOR STAGES. BANDWIDTH 300KC/S, AFC PULL IN + 500K/C/S. SENSITIVITY 20μVOLT. OVERALL SIZE 2½ x 5 x 1 INCH: 65dB VOLTAGE GAIN. THIS STRIP IS SUITABLE WHERE EXTRA IF SENSITIVITY IS REQUIRED AND ALSO FOR STEREO MULTIPLEX BROADCASTS. FULL AFC AND AGC.

PRICE £8.7.6 Post Free

FOR PURE SOUND
CHOOSE FM TUNERS

24 PAGE FULLY DETAILED CIRCUITS BOOK ON ABOVE UNITS NUMBER 184

PRICE £2.6 Post Free

QUALITY PRE-BUILT TRANSISTOR VHF EQUIPMENT
7 TRANSISTOR PORTABLE SUPERHET RADIO

Supplied as three pre-built printed Circuit Units.

A 7-Transistor Superhet Radio covering medium, long and short wavebands. Each unit supplied is ready built on miniature printed circuits. The units can be interconnected to make a portable or car radio. Alternatively Unit 1 can be used with existing if strips or Unit 2 with OSC/mixer stages, etc. The amplifier is a high gain good quality unit suitable for all applications.

★ Terrific Performance ★

UNIT 1
Press button OSC/Mixer stage. OC170 transistor. S.W. 5 to 15 MC/S. SW to 1620 KC/S. LW150O-TO 275 KC/S. Printed circuit size 3.4 x 2.1 x 1.8 in. output 465 KC/S. F.P. Pre-aligned and tested. 79/6

UNIT 2 (022-0001)
465 KC/S I.F. amplifier. 2-QC169 transistors. Double tuned I.F., S's diode detector, A.V.C., etc. Printed circuit size 3.5 x 1.5 x 1 in. pre-aligned and tested. 92/6

UNIT 3 (SG1205)
4 transistors, 1 watt audio amplifier. 60-16000 C/S 3dB, 3mV input for 1 watt. 2-OC71, 2-OC74 transistors. Printed circuit size 3.2 x 2.2 x 1.2 in. output 3.3 ohms 6-volt operation. 92/6

SUNDRIES (FOR ABOVE UNITS)
8 x 11in. M.L.S. Ferrite Aerial with coils 12/6 176pF + 176pF Tuner 7/6 2.30pf Trimmers 1/6 7 x 4 in. 3 ohm Speaker 15/- Bolt on Slow Motion Drive 1/6 P.P.I 6-volt Battery 2/9 Clips 1/- Volume control with on/off switch 4/6

TRANSISTOR FM TUNER

FULL COVERAGE 88 to 108 Mc/s.
A.F.C. AND A.G.C. WITH A.F.C. LOCK.
10.7 Mc/s I.F.
PRINTED CIRCUIT CONSTRUCTION.
2-OC171, 3-OC170 TRANSISTORS.
MATCHED OA19 DIODES ALSO A.G.C. AND DAMPING DIODES.
SENSITIVITY 1 MICROVOLT.
SIGNAL/NOISE RATIO BETTER THAN 55DB.
AF RESPONSE 25 c/s TO 25 Mc/s WITHIN 0.5 db.
350 Mc/s BANDWIDTH.

TOTAL COST
16gns.
p.p. 3/-

(Shown with cover removed)

★ Perfect quality—high sensitivity and stability. ★
TRANSISTOR MEDIUM WAVE SUPERHET TUNER

Model AMT-31

Features 3-Transistor and diode superhet medium wave tuner. Built on to printed circuit panel 2½ x 3½ inches with 4-fixing brackets. Fitted 5½ inch ferrite aerial—tuner covering 530 Kc/s to 1605 Kc/s. Designed to feed all types of transistor amplifier for portable or domestic use. Operates from 4½ volts at 2 to 4mA.

Supplied complete with full circuit 69/6 p.p. 1/6
• MW and SW Model £7.9.6 see page 90 •

MEDIUM WAVE AND 49 METRE AMATEUR BAND CONVERTOR

Model IMCODI (TSL)
Press button wave change printed circuit design. 470 Kc/s IF output. Size 1¾ x 3¾ in.

Price 47/6 pp. 1/6
Full details in Book No. 184 2/6d.

IDEAL UNITS TO FEED TRANSISTOR AMPLIFIERS OF PAGES 2/4/9/14/19.

★ 4 - CHANNEL TRANSISTOR MIXER ★
“EAGLE” MODEL MM4

A compact ultra-modern four channel transistorized mixer to add musical highlights and additional sound effects to your recordings. Even though your recorder or amplifier may have only a single input you can now increase its versatility, and provide up to four separately controlled inputs with the new MM-4. Permits mixing of four signals such as microphone, records, tuner, etc. into a single output. Inputs and output take standard quarter inch jack plugs. Completely transistorized and self-contained. Operates from a 9V battery. Handsome case has rubber feet to prevent scratching table-top, etc. Complete with battery and instructions.

Gain:-Approx. 6db; Maximum Input Signal:-1.5 Volts;
Maximum Output Signal: 2.5 Volts;
Output for Minimum Distortion: 2 Volts;
Hum: Zero.

Price 49/6 pp. 1/6

PLUG-IN AUDIO MIXER

An extremely versatile two channel mixer with individual volume controls. Plugs into single high impedance input. Suitable for Tape Recorders Amplifiers, etc. NO battery required. Two types available: AM3 (as illustrated), phono sockets in and phono plug out. AM5 Standard Jack sockets in and Standard Jack plug out.

Only 19/6 pp. 1/6

GT 50 TAPE JACK TUNER

Self power tuner covers full medium wave bands. Designed to feed valve or transistor amplifiers and recorders. Fitted standard jack plug.

Features high gain aerial circuit with adjustable coil coupled to micrometer tuning knob.

Price 29/- pp. 1/-

RADIO TUNERS—TWO AND FOUR CHANNEL MIXERS
TRANSISTOR AMPLIFIERS—also see pages 2/4/9/14

- **3/4 Watt 4 Transistor**

  Printed circuit Amplifier.
  - 15 to 2k ohm INPUT IMPEDANCE
  - 4 x 3/16 x 1/2 inch
  - 3 OHM SPEAKER OUTPUT
  - 7 1/2 to 9 VOLT OPERATED

  * Suitable battery ... ... 3/6
  * Battery connectors ... ... 1/-
  * 5k Volume control
    - with switch ... ... 4/6
    - or 100k volume control
      - with switch (crystal P.U.) ... ... 4/6
  * 5k Tone control ... ... 3/6
  * 0.04uFnd Tone ... ... 9d.
  * Gold insert knobs ... ... 9d. ea.
  * Mains unit (optional) 49/6 p.p. 2/-
  * Suitable speakers:
    - 5 inch 12/6
    - 2 1/2 inch 16/6
    - 7 x 4 inch 15/-

A printed circuit high gain amplifier of excellent sensitivity (5mV input for 750 mW output) uses Ediswan transistors XB112, XB113 and 2-XC171. Ideal for record players, AM or FM radio tuners, intercom or any application requiring a quality and reliable amplifier. 1 1/2 watts peak output.

**DESCRIPTIVE LEAFLET WITH USES ON REQUEST**

MINIATURE 4 TRANSISTOR
PUSH-PULL AUDIO AMPLIFIER
Model EG2004 size 3 in. x 1 1/2 in. x 3/4 in. A ready built miniature 250mW push-pull amplifier incorporating input and output transformers, 4 transistors, 9 volt battery snap cord (for power) speaker and volume connection leads. Ideal for use with record-players, intercoms, hearing aids, tape recorders, etc. Complete with FULL INSTRUCTIONS AND CIRCUIT DIAGRAM. 8/10 ohm impedance output.

PRICE 42/6 p.p. 1/-

Suitable 2 1/2 in. speaker 16/6

5k miniature control 5/6

Battery 2/6

MODEL A
125mW 3-transistor. Output for 25 to 60 ohm speaker or phone. 9 volt operated. Input 1.5 K. ohm.
Size 2 x 1 x 1 inch.
Price 39/6 p.p. 1/-
Complete with full details.

MODEL B
500mW 5-Transistor amplifier. Output to 15 ohm. Speaker response 50 C/s to 20 Kc/s. 9 volt operated.
Size 2 1/2 x 2 1/2 x 1/2 inch.
Price 59/6

MODEL C
High gain 4-transistor push-pull amplifier giving 1 watt output. Ideal for record players, intercoms, radios etc. Response 4-50db 60 c/s to 16 kcs: output to 3 ohm speaker. 6 Volt operated. 92/6 p.p. 2/-

MODEL D
Similar to above but 12 volt operated giving 1 1/2 watts output to 3 ohm speaker, 97/6 p.p. 2/-

MODEL E
4-Transistor record player amplifier--9 volt, 3 Ohms output. Supplied with volume control and 5 x 3 inch speaker.

BARGAIN OFFER 35/- p.p. 2/-

MODEL F
2 Watt version of Model C 55.26 p.p. 2/-

MODEL G
2 1/4 ... ... ... ...
55.76 p.p. 2/-

OTHER TRANSISTOR AMPLIFIERS

MULLARD 1 WATT AMPLIFIER

Transformers ... ... ... 21/- pair
4-Transistors ... ... ... 22/6 set
As specified by Mullards

MULLARD 500MW AMPLIFIER

Transformers ... ... ... 19/- pair
4-Transistors ... ... ... 22/6 set
As specified by Mullards

G.E.C. 2 WATT AMPLIFIER*

Transformers ... ... ... 25/- pair
4-Transistors ... ... ... 39/6 set
As specified by G.E.C.

G.E.C. 3 WATT AMPLIFIER*

Transformers ... ... ... 49/6
6-Transistors ... ... ... 57/6
i.e. 4-XA152 (= OC42) and 2-OC22.

WIRELESS WORLD 10 WATT (Circuits free)

3 ohm version with pre-amplifier
4 Transistors and diode ... ... ... 69/6
40 Volt version ... ... ... 79/6

TRANSFORMERS AND TRANSISTORS STOCKED FOR

Mullard 250mW, 500mW, 1 watt, 5 watt amplifiers.
G.E.C. 250mW, 500mW, 1 watt, 2 watt, 3 watt amplifiers. Repanco, PW and R/C amplifiers.
Wireless World 10 watt
And others, all parts stocked.

Send list of required items—we will quote by return of post.

PUBLICATIONS:

- No. 173 Transistor audio Amplifiers 3/6
- *No. 176 Transistor Amplifier manual 6/-
  (Showing circuits marked*)

19
CATHODEON MINIATURE CRYSTAL OVEN
FOR HC6U OR 2M TYPE CRYSTALS. 6 OR 12 Volt A.C./D.C., 89°C. COMPLETE WITH BASE AS ILLUSTRATED. 22/6 p.p. 1/- BRAND NEW 0.78 Amp 12 V, 0.39A 6 volt.

VALVES TUBES TUBES
- TRANSISTORS - QUARTZ CRYSTALS AND RECTIFIERS
ALL TYPES FULLY GUARANTEED

HC6/U SUB-MINIATURE THIRD OVERTONE CRYSTALS

- Note: ALL TYPES CAN BE USED ON THEIR FUNDAMENTAL FREQUENCIES, i.e. Divide Crystal frequency by 3.

Example: 33,000 Mc/s can be used at 33 Mc/s or 11 Mc/s or multiples of 11 Mc/s

<table>
<thead>
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<th>Crystal Frequency</th>
<th>Radio Control Frequency</th>
<th>Crystal Accuracy 0.005%</th>
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<tr>
<td>18.0060 Mc/s</td>
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- ¼ inch Pin Spacing
- Overall Size 2 1/2 x 11/4 x 3/8

SUBMINIATURE 27Mc/S RADIO CONTROL BAND CRYSTALS
TYPE HC6/U HERMETICALLY SEALED SHOCK RESISTANT 0.005% ACCURACY
SECOND HARMONIC TYPES SIZE 3/8 x 3/8

<table>
<thead>
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<th>Crystal Freq.</th>
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RADIO CONTROL
Light weight American overtone crystals. Frequency 27.255 Mc/s. For use with valve or transistor receivers and transmitters. Wire leads. Size 3/8 x 3/8 x 3/8 inches. 15/- each.

HC6/U SUB-MINIATURE 3/8 INCH SPACING
FOR VALVE OR TRANSISTOR TRANSMITTERS AND RECEIVERS

15/- each with socket

HPG-RO-4C CHANNEL

FT249-3 PIN FUNDAMENTALS

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<td>1607.5</td>
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<tr>
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<tr>
<td>1690.0</td>
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<tr>
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<td>1880</td>
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<td>1927.5</td>
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FOR MW/WM FM TUNER: HC6U Crystals are Base Ref No. 2. - All metal hermetically sealed - 7/6 each (Sockets 1/-)

FT171 3 PIN 7/8 INCH SPACING BANANA PIN

2030 Kc/s 2360 Kc/s
2045 2575
2065 2590
2080 2720
2105 2745
2125 3180
2145 3202.5
2220 3315
2260 3322.5
2305 3350

PTO FOR MORE TYPES
TYPE FT241A (1/ in. spacing)  
54th HARMONIC IN Mc/s 
(Base diagram No. 5) 

<table>
<thead>
<tr>
<th>Mc/s</th>
<th>20.0</th>
<th>20.8</th>
<th>21.6</th>
<th>22.4</th>
<th>23.2</th>
<th>26.1</th>
<th>26.9</th>
<th>27.8</th>
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</thead>
<tbody>
<tr>
<td>20.1</td>
<td>20.9</td>
<td>21.7</td>
<td>22.5</td>
<td>23.3</td>
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<td>21.1</td>
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<td>21.4</td>
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<td>26.0</td>
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</table>

TYPE FT241A (1/ in. spacing)  
72nd HARMONIC 5/- each 
(Base diagram No. 5) 

| Mc/s | 32.6 | 32.7 | 36.3 | 36.5 | 36.6 |

PIEZO 2-PIN 1/2 in. SPACING 
IN Mc/s at 7/6 each 
(Base diagram No. 6) 

<table>
<thead>
<tr>
<th>Mc/s</th>
<th>3150</th>
<th>3800</th>
<th>4145</th>
<th>4750</th>
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<td>3850</td>
<td>4570</td>
<td>9967.5</td>
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MOTOROLA 2-PIN 3/4 in. 
IN Mc/s at 7/6 each 
(Base diagram No. 6) 

<table>
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<th>Mc/s</th>
<th>1062.5</th>
<th>1150</th>
</tr>
</thead>
<tbody>
<tr>
<td>1087.5</td>
<td>1175</td>
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<td>1112.5</td>
<td>1140.6</td>
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<td>1140.6</td>
<td>1200.3</td>
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SPECIAL FUNDAMENTALS 

<table>
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<tr>
<th>Mc/s</th>
<th>80.86Kc/s</th>
<th>80.8Kc/s</th>
<th>OCTAL GLASS</th>
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<tbody>
<tr>
<td></td>
<td>100Kc/s R</td>
<td>102.4Kc/s (S.T.C. TYPE 4020)</td>
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<tr>
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<td>150Kc/s 2-PIN ROUND</td>
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<td>160Kc/s 2-PIN 10X (Base type 10)</td>
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<tr>
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<td>166Kc/s P.O. 4B</td>
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<tr>
<td></td>
<td>200Kc/s 2-PIN FT241A (Base type 5)</td>
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<tr>
<td></td>
<td>200Kc/s 3-PIN</td>
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<tr>
<td></td>
<td>250Kc/s 10X</td>
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<tr>
<td></td>
<td>285Kc/s FT241A (Base type 5)</td>
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<tr>
<td></td>
<td>378Kc/s B7G GLASS (Base type 8)</td>
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<tr>
<td></td>
<td>455Kc/s WIRE LEADS (as AR 83)</td>
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<tr>
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<td>465Kc/s HRO</td>
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<tr>
<td></td>
<td>500Kc/s 10XJ (Base type 3)</td>
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<tr>
<td></td>
<td>500Kc/s BROOKS SPECIAL</td>
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<tr>
<td></td>
<td>735Kc/s (as AR88LF)</td>
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<td>890Kc/s</td>
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<tr>
<td></td>
<td>1Mc/s/100Kc/s Twin Crystal</td>
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<tr>
<td></td>
<td>200Kc/s 3-PIN FT249</td>
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<tr>
<td></td>
<td>2500Kc/s OCTAL</td>
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<tr>
<td></td>
<td>5000Kc/s 2-PIN PIEZO</td>
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<td></td>
<td>10Mc/s 7A</td>
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<td>10Mc/s 10XJ (Base type 3)</td>
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<td></td>
<td>10Mc/s B7G GLASS (Base type 8)</td>
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<td>30Mc/s HGU</td>
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MINIATURE GLASS B7G BASE IN Mc/s at 7/6 
(Base diagram No. 8) 

<table>
<thead>
<tr>
<th>Mc/s</th>
<th>10,025</th>
<th>10,158.3</th>
<th>10,258.3</th>
<th>10,391.6</th>
<th>28,333.33</th>
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<tbody>
<tr>
<td>10,058.3</td>
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<td>10,325</td>
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<td>10,125</td>
<td>10,225</td>
<td>10,358.3</td>
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N.T. CUT, GLASS WIRE ENDS at 12/6 each 
(Base diagram No. 7) 

<table>
<thead>
<tr>
<th>10XAC/7</th>
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<th>10XAC/10</th>
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<tbody>
<tr>
<td>28Kc/s</td>
<td>28.5Kc/s</td>
<td>31.5Kc/s</td>
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MARCONI: G.E.C.: S.T.C. etc. 2-PIN 10X; 
FUNDAMENTALS IN Mc/s (1/2 inch pin spacing) 
(Base diagram No. 10) 

<table>
<thead>
<tr>
<th>Mc/s</th>
<th>1183</th>
<th>1588.68</th>
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<th>10,823</th>
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<td>1205</td>
<td>2295</td>
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<td>10,856</td>
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<td>1550.62</td>
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<td>3920</td>
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<td>1570</td>
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2-PIN CERAMIC BANANA PLUG 
IN Kcs at 7/6 each 
15,010 15,110 16,335 16,435 16,700 16,800 18,025 18,125 18,225 

OCTAL "PLUG-IN" CRYSTALS 

<table>
<thead>
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<th>Mc/s</th>
<th>6440</th>
<th>6200</th>
<th>3500</th>
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<tbody>
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<td>4600</td>
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<td>5960</td>
<td>6310</td>
<td>2500</td>
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<tr>
<td>8000</td>
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CRYSTAL SOCKETS 
For types 243 and types 241A, etc. 
(1/2 in. pin spacing) 
1/- each 
For types 10X, etc. (1/2 in. pin spacing) 
1/- each 
For types 10XJ (1in. pin spacing) 
1/- each 
For types HC6/LU or 2M 
1/- each 

3-PIN HOLDERS 
To take 10X or 10XJ 
1/3 each 

WE STOCK THE LARGEST RANGE IN THE COUNTRY OF QUARTZ CRYSTALS AT GIVE AWAY PRICES — FULLY GUARANTEED.

POSTAGE AND PACKING 6d. PER CRYSTAL OR 9d. FOR TWO
# Quartz Crystals

## Type FT243 (1/4 inch Pin Spacing) Fundamentals in Kc/s

<table>
<thead>
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<th>Kc/s</th>
<th>5675</th>
<th>5973</th>
<th>6250*</th>
<th>6540</th>
<th>6825</th>
<th>7106</th>
<th>7400</th>
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<th>7973</th>
<th>8250</th>
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<tbody>
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<td>7950</td>
<td>8240</td>
<td>8650</td>
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</tr>
</tbody>
</table>

(*) In 10X or 10XJ at 5(+).  
[N.B. Where the last figure of the above listed crystals is 3 or 6, this denotes 333 or 666, respectively (i.e., 5773 = 5773-333)].

**Complete Sets of 80 XTALs 5706-666—8340 Kc/s in Steps of 33-333 Kc/s**  
£5 0 0

**Complete Sets of 120 XTALs 5675—8650 Kc/s in Steps of 25 Kc/s**  
£6 10 0

---

## Sub-Min. Twin-Crystals B.T. Cut Glass Envelopes Wire-Ended

<table>
<thead>
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<th>Base diagram No. 7</th>
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<tbody>
<tr>
<td>10XAC/1</td>
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<td>19987.5 Kc/s</td>
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<tr>
<td>19937.5 Kc/s</td>
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<tr>
<td>10XAC/4</td>
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<tr>
<td>20187.5 Kc/s</td>
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<tr>
<td>20237.5 Kc/s</td>
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</table>
| 10/- PER TWIN CRYSTAL  
Also 28411.11 to 28544.44 Twin XTL B7G 10/- |

<table>
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<tr>
<th>Kc/s</th>
<th>5350</th>
<th>10.7 Mc/s for Use in IF Filter Circuits</th>
<th>7/6</th>
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<tbody>
<tr>
<td>RCA 455 Kc/s AS PER AR88</td>
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<td>456 Kc/s HRO CRYSTAL</td>
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## 10XJ Types 5/- Each

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**Over 600 Frequencies in Stock**  

[22]
| Transistors, Crystals, Valves, Components and Equipment | For the Amateur and Professional — All Types for Every Purpose | The Electronic Component Specialists for More Than 20 Years | See Page 24 for More Types | Return of Post Mail Order Service | 23 |
GS12c. 12 way version of above. Tag connections. Price 25/-

G10/214E. 10 way with number indication. 20 Kc/s maximum. Price 50/- Base 2/6

931A. Photo multiplier tube. Price 60/- Base 2/-


SELENIUM PHOTO CELL

Light Dependent Resistance
Cadmium Sulphide
Photo-conductive Cell.
Mullard Type ORP12
Dark resistance 10 megohm max. Minimum resistance with full light. 75 to 300 ohms.
Any voltage up to 110 volts Maximum dissipation 200 mW 8/6 p.p. 6d.
Simply connect in series with a battery and a relay, nothing else required. Ideal for all light operated switching and control.

OCP71 PHOTO TRANSISTOR
Average gain 50:
Max. volts –25
Max. current 20mA
Spectral response 1.55µi
Cut off 2µi
Dissipation 100m watt 25°C
Sensitivity 1.5 to 4mA with 75 ft. candle at –2V. Vc.
19/6

VALVE AND TUBE SOCKETS
AND SCREENING CANS

| Tube Number | Dia. inches | Heater Volts | Current amps | Anode 1 volts | Anode 2 volts | Grid Volts | Anode 3 volts | Dia. mm | Sensitivity mm/volt | Colour | Persistence of Scan | Focus Type | Deflection Type | Base Type | Price |
|-------------|-------------|--------------|--------------|---------------|---------------|------------|---------------|--------|---------------------|--------|---------------------|------------|-------------------|-----------|--------|----------|-------|
| VCR138A     | 3           | 4            | 1            | 1200          | 200           | –48        | 1200          | 90     | 0.07                | Green   | Medium             | ES        | ES                | CK12      | 45/-   |
| *VCR139A    | 3           | 4            | 1.1          | 800           | 120           | –10        | 800           | 64     | 0.217               | Green   | Medium             | ES        | ES                | PS12      | 25/-   |
| 3AP7        | 2           | 3.5          | 0.6          | 375           | 200           | 60         | 4000          | 76     | 0.1                 | Green   | Medium             | ES        | ES                | U14       | 12/-   |
| 3AP8        | 2           | 2            | 2.1          | 430           | 1500          | –50        | –             | 75     | 0.233               | Green   | Medium             | ES        | ES                | U3M7      | 30/-   |
| 5FP7        | 5           | 6.3          | 0.6          | 250           | 7000          | –45        | –             | 127    | –                   | Blue    | Long               | ES        | ES                | MG        | 20/-   |
| VCR517C     | 6           | 4            | 1            | 2000          | 525           | –80        | 3000          | 160    | 0.12                | Blue    | Medium             | ES        | ES                | CK12      | 30/-   |
| VCR97       | 6           | 4            | 1            | 200           | 450           | –100       | 2000          | 152    | 0.3                 | Green   | Short              | ES        | ES                | U412      | 40/-   |
| *O3D (CV159) | 4           | 4            | 1.1          | 345           | 1200          | –30        | –             | 115    | 0.26                | Blue    | Medium             | ES        | ES                | PS12      | 59/-   |
| 3GP1        | 3           | 6.3          | 0.6          | 350           | 1500          | –50        | –             | 76     | 0.32                | Green   | Medium             | ES        | ES                | U17       | 59/-   |
| 89D (CV193) | 4           | 6.3          | –            | 2000          | 325           | –50        | 2500          | 102    | 0.38                | Green   | Medium             | ES        | ES                | –         | –      |

*Equivalent to ACR10 and 21D tubes. † Double beam tube.

If you are unable to find the Components and Equipment you require in this catalogue then write to us and maybe we can help.

CATHODE RAY TUBES

(Post and packing extra.
Up to 3 inch 2/6
Over 3 inch 4/6)
# TRANSISTORS

**BRAND NEW STOCKS 100% FIRST GRADE FULLY GUARANTEED**

**NEW TYPES — LOWER PRICES**

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**WE CAN ADVISE AS TO WHICH TYPE IS SUITABLE FOR YOUR CIRCUIT**

Stocks are continually changing, new types become available every day. Enquiries invited for any Type not listed.
### Miniature Diodes and Rectifiers

#### Miniature Silicon Power Rectifiers

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<td>R10</td>
<td>500IV</td>
<td>50V</td>
<td>20Amp</td>
</tr>
<tr>
<td>IN186</td>
<td>R10</td>
<td>500IV</td>
<td>50V</td>
<td>100Amp</td>
</tr>
<tr>
<td>45L</td>
<td>R13</td>
<td>500IV</td>
<td>50V</td>
<td>up to 10Amp</td>
</tr>
<tr>
<td>ZR31C</td>
<td>R10</td>
<td>100IV</td>
<td>50V</td>
<td>50Amp</td>
</tr>
</tbody>
</table>

### GEC - Mullard - Hughes - AEI - USA Diodes and Rectifiers

- CV448 (R4) 2/- | SX783 | 7/-
- CV425 (R4) 2/- | OA200 (R4) 5/-
- AAY12 (R4) 6/- | OA202 (R4) 5/-
- AAZ13 (R4) 4/6 | OA210 (R6) 7/-
- EW99 (R1) 6/- | HA396 (R4) 6/-
- GEX941 (R4) 6/- | HG5002 (R4) 4/-
- GEX951 (R4) 6/- | CV5064 (R4) 2/-
- OA5 (R1) 6/- | XD202 (R4) 2/-
- OA7 (R4) 4/- | BY213 (R10) 7/-
- OA10 (R1) 6/- | SX631 (R6) 6/-
- OA47 (R4) 3/- | SX632 (R6) 6/-
- OA70 (R2) 2/6 | SX633 (R6) 6/-
- OA17 (R4) 2/6 | SX634 (R6) 6/-
- OA79 (Pair) 5/- | SX641 (R1) 3/-
- XD201 (R4) 2/- | IN34A (R4) 2/-
- BY100 (R2) 6/- | IN455 (R4) 5/-
- BY112 (R2) 5/- | IN205 (R1) 5/-
- GS9 (R2) 4/- | IN1084 (-) 5/-
- OA58 (R2) 4/- | IN91 (R2) 5/-
- OA86 (R4) 4/- | SN21H (Quad) 10/-
- OA90 (R4) 2/6 | CG402 (R4) 2/-
- OA91 (R4) 2/6 | CG85 (R4) 2/-
- OA95 (R4) 2/6 | CX7 (R4) 2/-
- OA211 (R6) 9/6 | EX64 (R4) 3/-

### Precision Zener Reference Elements

- IN429 6.2V ± 5%: 20 ohms at 7mA, 200mW at 25°C. (Deraeting 1mV/C) ±0.50V change from -55°C to +100°C. 1%/each. (Outline Ref. R9)
- IN430 8.4V ± 5%; 10mA at 25°C. 15ohms. Temp. Coeff. ±0.002%/°C from -55°C to +100°C. 0.2%/each. (Outline Ref. R12)

### Special Offer

- Germanium Power Rectifier Type VA713E (Ref. Type R13). English Electric Manufacture. 80°IV max. recurrent. 1600mV max transient. 56 volts Rms. maximum at 1.5Amps. "Max. at 35°C and 20 sq. ins. metal." Price 10/- each.

### Zener Diodes

- OA200 5% 4.7V 12/-
- OA201 5% 4.7V 12/-
- OA202 5% 4.7V 12/-
- OA203 5% 4.7V 12/-
- OA204 5% 4.7V 12/-
- OA205 5% 4.7V 12/-
- OA206 5% 4.7V 12/-
- OA207 5% 4.7V 12/-
- OA208 5% 4.7V 12/-
- OA209 5% 4.7V 12/-
- OA210 5% 4.7V 12/-
- OA211 5% 4.7V 12/-
- OA212 5% 4.7V 12/-
- OA213 5% 4.7V 12/-

### Selenium Full Wave

- In21 5° Band 3/6
- In21A 3000Mc/s 5° 3/6
- In22 5° Band 3/6
- In23 X° Band 2500 Mc/s 4/-
- CV2226 5° up to Mc/s 30/-
- CV2258 0° 12000 35/-

### Silicon HF Microwave Diodes

- In21 5° Band 3/6
- In21A 3000Mc/s 5° 3/6
- In22 5° Band 3/6
- In23 X° Band 2500 Mc/s 4/-
- CV2226 5° up to Mc/s 30/-
- CV2258 0° 12000 35/-

### Meter Rectifiers

- Half Wave: WX6, W6, STC M3 1/6 ea.
- Bridge: lmA: 5mA: 10mA 12/- ea.

- New Types become available every day. Enquiries invited for any type not listed.
**2 POLE 2 WAY 12 TO 28 VOLT**

Miniature relay size 1¼ x 1 x ¾ in. Resistance 700 ohm. Consumption 18mA on 12 volts. 2 pole 2 way contacts. Contact rating up to 2 Amps. 100 volt, 30 watts maximum.

Price 7/6 p.p. 9d.

---

**2 POLE 2 WAY 9 TO 24 VOLTS**

250 ohm miniature type size 1¼ x 1 x ¾ in.
Current 36mA on 9 volt supply. 2 pole 2 way contacts, up to 2 Amps. 100 volt, 30 watts maximum.

Price 7/6 pp. 9d.

---

**350 OHM 4½ TO 12 VOLT**

Miniature type overall size 1¼ x 1½ x ¾ in.
Current on 4½ volts about 13mA. Contacts rated up to 1Amp.

* 4 pole on/off type 10/- pp. 9d.
* 2 pole on-2 off type 10/- pp. 9d.

---

**RELAYS SENSITIVE MINIATURE TYPES**

**HEAVY DUTY 12 to 24 volt CHANGE OVER**

250 ohm miniature relay size 1¼ x 1 x ¾ in.
12 to 24 volt operation.
48mA current on 12 volts.
On/Off contacts rated at 10 Amps, maximum.
Up to 100 volts 50 watts.

Price 7/6 pp. 9d.

---

**2 POLE 2 WAY**

6 to 12 volt operated.
Resistance 675 ohms.
Current on 6 volts about 9mA.
Size ¼ x ½ x ¾ in.
Low current contacts.

Price 12/6 pp. 6d.

---

**SUB MINIATURE 2 POLE 2 WAY**

4½ x 1 x 1½ ins.
Resistance 700 ohm.
Current 18mA on 12 volts.
On/Off contacts rated up to 1Amp. 100 volt, 30 watts maximum.

Price 12/6 pp. 9d.

---

**ELECTROMAGNETIC COUNTER**

Four figure counter up to 9999. Overall size 4½ x 1 x 1 inch. Operates from 4½ volts at 1 amp or up to 12 volts.

Price 10/- p.p. 9d.

---

**TRANSISTORS**

COMPLETE RANGE IN STOCK.
PNP AND NPN SILICON AND GERMANIUM TYPES.
ALLOY JUNCTION, PLANAR, DIFFUSED ALLOY, MESA.
GROWN JUNCTION, EPITAXIAL PLANAR, DIFFUSED MESA.
EVERY TYPE FOR ALL USES

---

**TRANSISTOR TESTER**

Measures transistor leakage and diode reverse current for PNP and NPN transistors. Current gain 'beta' up to 200 and 'Alpha' 0.9 to 0.995. Bias current 1mA for PNP and NPN types and 5mA for Power.

Easy to use instrument with 4 inch 50 microamp. meter.
Size 8 x 4 x 3 inch.
Weight 2½ lbs.

Price £9 - 17 - 6 p.p. 2/6
VERNIER DIALS
- Model T501
  1½ inch diameter
  10/6
- Model T502
  2 inch diameter
  12/6
- Model T503
  3 inch diameter
  15/-

Precision slow motion or vernier dial with approx. 8 to 1 ratio. Surface mounting.
Accurately centred metal insert for ½ inch shaft. Reads counter clockwise 0 to 100 through 180°. Simple 2-hole fixing.
Ideal for any tuner or control to provide slow motion fine adjustment.
(Fost & Packing 1/- Any Type)

VERNIER DIAL
Type 1257 slow motion dial 1½ inch diameter scroll type.
Reads clockwise 0 to 100 through 180°
Reduction ratio about 27 to 1
Simple two hole surface mounting. Ideal for any ½ inch shaft.
Pushfit.
7/6 p.p. 6d.

★ JACKSON TYPE 4489
Slow motion dial with 6:1 Reduction drive.
PRICE: 17/6 pp. 1/6

THERMISTORS
Directly heated bead types. Enclosed glass construction.
STC R53:
- 3 Kohm at 20°C; 1 Kohm at 100°C; 3½ ohm at 300°C
22/6 p.p. 6d. 3 mW power.
  2/4 pp. 6d.
- HIVAC type BL neon screw in mes fitting. Voltages as for miniature neon below.
  1/3 pp. 3d.
- 250mA mini-fuses 6d. each also range of ½ inch cartridge fuses 6d. each.
- GS12C Dekatron tube holder.
  25/6
- GS10CS Dekatron plug in type 25/6
- Base for GS10CS.
  3/6
- 931A photo multiplier tubes complete with base.
  60/6
- NSP2 stroboscope tube
  15/6
- M2H Beta liquid sampling tube
  22/6 pp. 1/6

MES LAMP HOLDER
Bulgin chrome bulb holder. Single hole fitting with red glass. ½ inch over all diameter.
Price 2/6 pp. 6d.
- Also enclosed Bulgin type (not chromed)
  2/6 pp. 6d.

PUSH-BUTTON SWITCH
6 pole 2 way push on release off switch as illustrated. Overall size 1 x 1 x 1 inch. Two hole fixing. Ideal for TX/RX and intercomms.
Price 6/- pp. 6d.

MINIATURE NEON
HIVAC type 16L or 34L (direct replacement for American NE2)
Ideal indicator for all voltages AC or DC from 80 to 250 volts.
Series resistance required:
  For 70-90 volts—68k ½w
  90-120 ——82k
  200-250 ——220k

2/-
p.p. 6d.

220/250 VOLT MAINS NEON
Single hole fixing:
100% safe enclosed in moulded nylon. Suitable for mains equipment requiring indication of 'on'.
4/6 each pp. 6d.

BULGIN PILOT BULB HOLDER
- For any screw in mes type miniature pilot or torch bulb. Red or green glass 1/9d. each pp. 3d.

RADIO CONTROL CRYSTAL
New 27.25 Mc/s. High output overtone crystal. Light weight miniature wire ends.
Suitable for valve or transistor circuits.
15/- pp. 6d. Fully Guaranteed

RADIO CONTROL VALVE
Miniature wire end type DL68.
Brand new and Fully Guaranteed.
5/- pp. 6d.
(5 pin flat socket 9d.)
Also XFY34 15/-

MAINS/BATTERY NEON INDICATOR
Single hole fixing.
Complete with resistor and panel fixing clip.
Code Yellow 190/250 volt
Code Red/Black 90/120 volt
Price 3/- Each. (pp. 6d.)
FERRITE AERIALS
(Postage and packing 9d. any type)

100% BEST GRADE FERRITE

WE CAN ADVISE AS TO THE CORRECT AERIAL TO USE FOR TRF OR SUPERHET.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>WAVEBAND</th>
<th>TUNER</th>
<th>SIZE (Inches)</th>
<th>DETAILS</th>
<th>CIRCUIT</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>TSL1</td>
<td>MW</td>
<td>250/300 pf.</td>
<td>22 x 3/8</td>
<td>Slab with Secondary</td>
<td>With Aerial</td>
<td>3/6</td>
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<tr>
<td>TSL2</td>
<td>MW</td>
<td>120 pf.</td>
<td>1 1/4 x 3/4</td>
<td>With Secondary</td>
<td>With Aerial</td>
<td>3/6</td>
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<tr>
<td>M4</td>
<td>MW</td>
<td>365 pf.</td>
<td>4 x 11/16</td>
<td>Tapped with Reaction Overwind</td>
<td></td>
<td>6/-</td>
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<tr>
<td>ML5</td>
<td>MW/LW</td>
<td>365 pf.</td>
<td>5 x 3/4</td>
<td>Tapped with MW Reaction Overwind</td>
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<td>7/6</td>
</tr>
<tr>
<td>S4</td>
<td>MW</td>
<td>450/500 pf.</td>
<td>4 x 11/16</td>
<td>General Purpose</td>
<td></td>
<td>4/-</td>
</tr>
<tr>
<td>FS3</td>
<td>MW</td>
<td>208 pf.</td>
<td>3 x 1</td>
<td>Slab with Secondary</td>
<td>With Aerial</td>
<td>7/6</td>
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<tr>
<td>FS4</td>
<td>LW</td>
<td>208 pf.</td>
<td>3 x 1</td>
<td>Slab with Secondary</td>
<td>With Aerial</td>
<td>7/6</td>
</tr>
<tr>
<td>FS2</td>
<td>MW/LW</td>
<td>365 pf.</td>
<td>5 x 11/16</td>
<td>Slab with Secondaries</td>
<td>With Aerial</td>
<td>13/6</td>
</tr>
<tr>
<td>FR1</td>
<td>MW/LW</td>
<td>500 pf.</td>
<td>8 x 11/16</td>
<td>For Valve Circuits</td>
<td></td>
<td>12/6</td>
</tr>
<tr>
<td>FR39</td>
<td>MW/LW</td>
<td>208 pf.</td>
<td>3 x 1</td>
<td>Slab with Secondaries</td>
<td>With Aerial</td>
<td>10/6</td>
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<tr>
<td>FS30</td>
<td>MW/LW</td>
<td>208 pf.</td>
<td>5 x 1</td>
<td>Slab with Secondaries</td>
<td>With Aerial</td>
<td>10/6</td>
</tr>
<tr>
<td>FS40</td>
<td>85/200 metres</td>
<td>208 pf.</td>
<td>5 x 11/16</td>
<td>Slab with Secondaries</td>
<td>With Aerial</td>
<td>7/6</td>
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<tr>
<td>FR2</td>
<td>MW/LW</td>
<td>365 pf.</td>
<td>8 x 11/16</td>
<td>Slab with Secondaries</td>
<td>Regency</td>
<td>12/6</td>
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<td>PWKR1</td>
<td>MW/LW</td>
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<td>6 x 3/4</td>
<td>Tapped, also Overwind</td>
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<td>4/6</td>
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<td>MS</td>
<td>MW</td>
<td>450/500 pf.</td>
<td>2 x 11/16</td>
<td>With Secondary</td>
<td>With Aerial</td>
<td>4/6</td>
</tr>
<tr>
<td>FRM1</td>
<td>100/200 metres</td>
<td>100 pf.</td>
<td>2 x 11/16</td>
<td>Single winding</td>
<td></td>
<td>4/6</td>
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<td>FRM8</td>
<td>MW</td>
<td>450/500 pf.</td>
<td>2 x 11/16</td>
<td>With Secondaries and Car Aerial Coil</td>
<td>Weyrad 1/6</td>
<td>12/6</td>
</tr>
<tr>
<td>RA2W</td>
<td>MW/LW</td>
<td>208 pf.</td>
<td>6 x 11/16</td>
<td>With Secondaries and Car Aerial Coil</td>
<td></td>
<td>1/6</td>
</tr>
<tr>
<td>RA2W/4</td>
<td>MW/SW</td>
<td>208 pf.</td>
<td>6 x 11/16</td>
<td></td>
<td></td>
<td>12/6</td>
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HIGH 'Q' R.F. CHOKES

<table>
<thead>
<tr>
<th>RFC</th>
<th>1.5 mH (illustrated)</th>
<th>1/6</th>
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<tbody>
<tr>
<td>CH1</td>
<td>2.5 mH</td>
<td>2/6</td>
</tr>
<tr>
<td>CH2</td>
<td>5 mH</td>
<td>2/6</td>
</tr>
<tr>
<td>CH3</td>
<td>7.5 mH</td>
<td>2/6</td>
</tr>
<tr>
<td>CH4</td>
<td>10 mH</td>
<td>2/6</td>
</tr>
<tr>
<td>RFC8</td>
<td>5 microhenry (1 1/2 x 3/16 in.)</td>
<td>2/-</td>
</tr>
<tr>
<td>RFC5</td>
<td>2.5 mH (1 1/2 x 3/16 in.) (100mA)</td>
<td>3/6</td>
</tr>
<tr>
<td>QC1</td>
<td>23 mH (Osmor)</td>
<td>6/9</td>
</tr>
<tr>
<td>QC2</td>
<td>6.5 mH (Osmor)</td>
<td>6/-</td>
</tr>
<tr>
<td>MRC</td>
<td>H.F. choke (3/4 x 3/4 in.)</td>
<td>9d</td>
</tr>
<tr>
<td>SC</td>
<td>Suppressor choke (1 1/2 x 3/16 in.)</td>
<td>9d</td>
</tr>
<tr>
<td>NEOSID</td>
<td>1 amp choke core (1 1/2 x 1/4 in.)</td>
<td>6d</td>
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FERRITE RODS (Postage and packing 6d. any type)

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<tr>
<th>2 inch length</th>
<th>1/2 inch diameter</th>
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<tr>
<td>2 1/2</td>
<td>1/2</td>
<td>1/-</td>
</tr>
<tr>
<td>4</td>
<td>1/2</td>
<td>1/6</td>
</tr>
<tr>
<td>4 1/4</td>
<td>1/2</td>
<td>2/-</td>
</tr>
<tr>
<td>5</td>
<td>1/2</td>
<td>1/6</td>
</tr>
<tr>
<td>8</td>
<td>1/2</td>
<td>3/6</td>
</tr>
<tr>
<td>8 1/4</td>
<td>1/2</td>
<td>3/6</td>
</tr>
<tr>
<td>10</td>
<td>1/2</td>
<td>4</td>
</tr>
<tr>
<td>5 1/2 inch x 1 inch x 1/4 inch Slab</td>
<td>2/6</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL OFFER

Set of miniature IFTS(3) and OSC. coil. Twin gang. Ferrite aerial, dial and superhet circuit.

Set of 7 Items with circuit 20/- Model H402

SUB-MINIATURE COILS

Set of 4—7mm. square superhet coils. Oscillator and 3-IFTS. 465/470 Ke/s.

10/- Set of Four
TRF, SUPERHET and CRYSTAL SET COILS

(Posting and packing 6d. per coil unless stated.)

*DRX1 High gain dual range crystal set coil. 500 pf. Tuning 3/-
*DRR2 High gain dual range coil with reaction 500 pf. Tuning (supplied with valve circuits) 4/6
*HMX High "Q" MW aerial coil (500 pf. Tuning) 3/6
*HLX High "Q" LW aerial coil 3/6
*TM59 3 to 9 Mc/s winding 100 pf. Tuner 2 1/2 in. former 2/6
*HF2 27 Mc/s Aerial coil 2 1/2 in. 30 pf. Tuning 2/6
*HFS/6 "Carver" coil (3 to 12 Mc/s with 100 pf. Tuner) 6/-
*DRM3 matched pair TRF Coils with reaction on HF Coil. MW/LW 500 pf. Tuning 9/- pair
*SH4 MW/LW Superhet pairs. Comprising one MW/LW aerial coil and one MW/LW oscillator coil. Complete with circuits 500 pf. Tuning 9/- pair

AM/FM I.F.T.

★ Combined 465 Kc/s and 10.7 Mc/s I.F.T.
Size 1 1/2 x 2 1/2 x 1 inch 5/-
★ Ratio Discriminator (FM)
Size 1 1/2 x 2 1/2 x 1 inch 8/6

FOR VALVE CIRCUITS ONLY.

DENCO I.F.T.

★ 465 Kc/s I.F. for valve circuits. Supplied with base template and connections. Miniature type size 1 1/2 x 2 1/2 x 1/2 inch.
I.F.T. 11/465 6/- each
★ 10.7 Mc/s I.F.T. as above (I.F.T. 11/10.7) 6/- each
★ RDI/1 Ratio Discriminator 10.7 Mc/s 12/6
★ 1.6 Mc/s I.F.T.'s (Size as above) 6/-

MISCELLANEOUS

Plessey miniature, Slug Tuned, Double Tuned 465 Kc/s I.F.T.'s. 9/ each or 9/6 pair
Weareite Standard 465 Kc/s I.F.T.'s. 4/- each or 7/6 pair

COIL FORMERS

1/2 inch POLY, with SLUG 9d.
3/8 inch POLY, with SLUG 9d.
Denco Neosid Pot Core Assembly Type 10D 3/6 p.p. 1d.
3/8 inch or 1/2 inch DUST SLUGS 3/6 each TRIMMING TOOL 1/-

WEYMOUTH ADJUSTABLE MIDGET IRON CORED COILS

Band Coverage Aerial H.F. Osc. Trimmer Padder Price
1 800/2000 HA1 HH1 HO1 50 pf. 180 pf. 3/9 each
2 250/800 HA2 HH2 HO2 50 pf. 400 pf. 3/9
3 200/550 HA3 HH3 HO3 50 pf. 500 pf. 3/9
4 90/250 HA4 HH4 HO4 50 pf. 1000 pf. 3/9
5 33/100 HA5 HH5 HO5 50 pf. 2500 pf. 3/9
6 16/50 HA6 HH6 HO6 50 pf. — 3/9
7 12.5/37 HA7 HH7 HO7 50 pf. — 3/9

(Post and packing 6d. per coil)

WEAREITE SUPERHET COILS (500 pf. Tuning capacity)

Coverage Aerial H.F. Osc. Connections
700/2000 PA1 PHF1 PO1 Reading clockwise from Red sleeve.
200/557 PA2 PHF2 PO2 Red, Grid.
16/47 PA3 PHF3 PO3 Aerial.
12/35 PA4 PHF4 PO4 AVC.
34/100 PA5 PHF5 PO5 Earth.
90/260 PA6 PHF6 PO6
250/750 PA7 PHF7 PO7

Price 4/- each

SEE PAGES 34/35 FOR TRANSISTOR CIRCUIT COILS
# OSMOR ‘Q’ COILS AND RF CHOKE

(All Coils include Circuit Connection Details). Postage and Packing 6d. any coil.

- HIGH ‘Q’ LOW LOSS ADJUSTABLE CORES • ONE HOLE FIXING • SMALL SIZE • MAINS OR BATTERY SUPERHETS. I.F. 450–480 Kc/s. Size 1 inch × ¼ inch diameter

<table>
<thead>
<tr>
<th>Coil No.</th>
<th>Waveband (metres)</th>
<th>Stage</th>
<th>Colour Code</th>
<th>Inductance (microhenries)</th>
<th>Fixed Con. Value</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>QA1</td>
<td>S.W. 13–35</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Purple</td>
<td>Aperiodic</td>
<td>0.6 1.1</td>
<td>0.1 mfd</td>
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<tr>
<td>QHF1</td>
<td></td>
<td></td>
<td></td>
<td>0.6 1.1</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO1</td>
<td></td>
<td></td>
<td></td>
<td>0.5 0.7</td>
<td>4/-</td>
<td></td>
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<tr>
<td>QA2</td>
<td>S.W. 15–50</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Yellow</td>
<td>Aperiodic</td>
<td>1.4 1.9</td>
<td>0.1 mfd</td>
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<tr>
<td>QHF2</td>
<td></td>
<td></td>
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<td>1.4 1.9</td>
<td>4/-</td>
<td></td>
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<tr>
<td>QO2</td>
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<td>1.1 1.6</td>
<td>4/-</td>
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<tr>
<td>QA3</td>
<td>S.W. 35–120</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Green</td>
<td>Aperiodic</td>
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<td>0.1 mfd</td>
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<td>QHF3</td>
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<td></td>
<td></td>
<td>3 5</td>
<td>4/-</td>
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<tr>
<td>QO3</td>
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<td></td>
<td>2.5 4.8</td>
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<tr>
<td>QA4</td>
<td>Shipping 70–230</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Black</td>
<td>Aperiodic</td>
<td>17 42</td>
<td>0.1 mfd</td>
</tr>
<tr>
<td>QHF4</td>
<td></td>
<td></td>
<td></td>
<td>17 42</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO4</td>
<td></td>
<td></td>
<td></td>
<td>10 22</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QA5</td>
<td>M.W. 190–520</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Blue</td>
<td>Bottom end condenser</td>
<td>130 215</td>
<td>2500 pf</td>
</tr>
<tr>
<td>QHF5</td>
<td></td>
<td></td>
<td></td>
<td>130 215</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO5</td>
<td></td>
<td></td>
<td></td>
<td>70 130</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QA6</td>
<td>L.W. 800–2000</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Red</td>
<td>Bottom end condenser</td>
<td>1600 2600</td>
<td>2500 pf</td>
</tr>
<tr>
<td>QHF6</td>
<td></td>
<td></td>
<td></td>
<td>1600 2600</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO6</td>
<td></td>
<td></td>
<td></td>
<td>400 720</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QA8</td>
<td>M.W. 190–560</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Brown</td>
<td>Aperiodic</td>
<td>100 175</td>
<td>0.1 mfd</td>
</tr>
<tr>
<td>QHF8</td>
<td></td>
<td></td>
<td></td>
<td>100 175</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO8</td>
<td></td>
<td></td>
<td></td>
<td>65 120</td>
<td>4/-</td>
<td></td>
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<tr>
<td>QA9</td>
<td>L.W. 800–2000</td>
<td>Aerial H.F. Osc.</td>
<td>Blue Green Red Clear</td>
<td>Aperiodic</td>
<td>2000 2600</td>
<td>0.1 mfd</td>
</tr>
<tr>
<td>QHF9</td>
<td></td>
<td></td>
<td></td>
<td>2000 2600</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QO9</td>
<td></td>
<td></td>
<td></td>
<td>400 720</td>
<td>4/-</td>
<td></td>
</tr>
<tr>
<td>QA61</td>
<td>L.W. 800–2000</td>
<td>Aerial H.F.</td>
<td>Blue Green Red</td>
<td>Bottom end condenser</td>
<td>1800 2600</td>
<td>2500 pf</td>
</tr>
<tr>
<td>QA81</td>
<td>M.W. 190–520</td>
<td>Aerial H.F.</td>
<td>Blue Green Brown</td>
<td>Aperiodic</td>
<td>100 175</td>
<td>0.1 mfd</td>
</tr>
<tr>
<td>QA91</td>
<td>L.W. 800–2000</td>
<td>Aerial H.F.</td>
<td>Blue Green Clear</td>
<td>Aperiodic</td>
<td>2000 2600</td>
<td>0.1 mfd</td>
</tr>
</tbody>
</table>

The above stated wavebands are obtained with a 500 pf (0.0005) tuning condenser. However a 365 pf may be used reducing by about ½ th the low frequency end of the waveband, i.e., M.W. with 500 pf tuning covers 190–560 metres, reduces to cover 190–490 metres with 365 pf tuning capacitor.

**SUNDARY COILS AND CHOKE**

| QR11D    | MW/LW T.R.F. Dual Range with reaction | 7/6      | QC1     | 23mH Allwave choke | 6/9  |
| QA11D    | MW/LW T.R.F. Dual Range               | 6/- each | QC2     | 6.5 mH R.F. choke   | 6/-  |
| QA12D    | MW/LW H.F. Coil for T.R.F.            | 6/-      |         |                   |     |
| SWQ1     | SW 11 to 31 Mc/s Aerial/H.F. with reaction | 6/-      |         |                   |     |
| SWQ2     | SW 4½ to 12 Mc/s Aerial/H.F. with reaction | 6/-      |         |                   |     |

See separate section for all transistor coils and chokes.
**TRANSISTOR SUPERHET COILS**

*(Post and Packing 6d. per Coil)*

**All parts to complete circuits using all listed coils are available from stock**

*See Page 36*

† Printed circuits available see page 47

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### WEYMOUTH (WEYRAD)

Note: IF Frequency can generally be adjusted from 455 kc/s to 480 kc/s.

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>P50/1AC</td>
<td>1 1/2 x 1/4 in.</td>
<td>Oscillator for OC44/XA102</td>
<td>MW/LW</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td></td>
<td>5/4</td>
</tr>
<tr>
<td>P50/2CC</td>
<td>1 x 1/4 in.</td>
<td>1st and 2nd I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P50/3CC</td>
<td>1/2 x 3/8 in.</td>
<td>Final I.F.T. matched to diode</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P50/1A</td>
<td>3/4 x 1/8 in.</td>
<td>Oscillator for OC170/AF117</td>
<td>MW</td>
<td>208 +176</td>
<td>470 Kc/s</td>
<td></td>
<td>5/6</td>
</tr>
<tr>
<td>P50/1AS</td>
<td>1 x 1/8 in.</td>
<td>Oscillator for OC170/AF117</td>
<td>SW</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td></td>
<td>5/6</td>
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<tr>
<td>P71</td>
<td>1 1/2 x 1/4 in.</td>
<td>1st I.F.T. double tuned</td>
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<td>470 Kc/s</td>
<td></td>
<td>6/3</td>
</tr>
<tr>
<td>P72</td>
<td>1 1/2 x 1/4 in.</td>
<td>2nd I.F.T. double tuned</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/3</td>
</tr>
<tr>
<td>P50/3V</td>
<td>1 x 1/4 in.</td>
<td>Final I.F.T. to diode</td>
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<td>470 Kc/s</td>
<td></td>
<td>6/3</td>
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</table>

### WIRELESS TELEPHONE

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTC1</td>
<td>1 1/8 x 1/8 in.</td>
<td>Oscillator for OC44/XA102</td>
<td>MW/LW</td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>5/6</td>
</tr>
<tr>
<td>WTC2</td>
<td>1 1/8 x 1/8 in.</td>
<td>1st and 2nd double tuned I.F.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>WTC3</td>
<td>1 1/8 x 1/8 in.</td>
<td>Final I.F.T. to diode</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
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### SUB MINIATURE OSCILLATOR AND IFTS

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTC101</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(Red) Osc. coil</td>
<td>MW/LW</td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>3/6</td>
</tr>
<tr>
<td>WTC102</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(White) 1st I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>3/6</td>
</tr>
<tr>
<td>WTC102B</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(White) 2nd I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>3/6</td>
</tr>
<tr>
<td>WTC103</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(Black) Final I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>3/6</td>
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### MINIATURE TYPES

<table>
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<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH01</td>
<td>1 x 1/2 in.</td>
<td>Red 6 pin oscillator</td>
<td>MW/LW</td>
<td></td>
<td>465/470Kc/s</td>
<td></td>
<td>3/6</td>
</tr>
<tr>
<td>BH02</td>
<td></td>
<td>White, 1st and 2nd IFT</td>
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<td></td>
<td>470 Kc/s</td>
<td></td>
<td>3/6</td>
</tr>
<tr>
<td>BH03</td>
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<td>Red /Black, Final IFT</td>
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<td>470 Kc/s</td>
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<td>3/6</td>
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### OSMOR-PW

<table>
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<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW/01</td>
<td>1/2 x 1/4 in.</td>
<td>6 Pin Oscillator</td>
<td>MW/LW</td>
<td>208+176</td>
<td>470 Kc/s</td>
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<td>5/4</td>
</tr>
<tr>
<td>PW/2</td>
<td>1/2 x 1/4 in.</td>
<td>1st and 2nd I.F.T.'s</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PW/3</td>
<td>1/2 x 1/4 in.</td>
<td>Final I.F.T. to Diode</td>
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<td>470 Kc/s</td>
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### T.S.L.

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Size</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLS1</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(Green) Osc. for Med. waves</td>
<td>MW</td>
<td>120+120</td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>TLS2</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(White) 1st I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>TLS3</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(White) 2nd I.F.T.</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>TLS4</td>
<td>1/2 x 1/4 x 1/4 in.</td>
<td>(Mauve) Final I.F.T. to Diode</td>
<td></td>
<td></td>
<td>470 Kc/s</td>
<td></td>
<td>6/6</td>
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### FM VHF COILS

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Wavebands</th>
<th><em>Tuner (See Note)</em></th>
<th>I.F.</th>
<th>Circuit and Layout</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerial Coil Code Blue</td>
<td>IST IFT 10.7 Mc/s Code Orange</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td>Circuit Free with tuner</td>
<td>6/6</td>
<td></td>
</tr>
<tr>
<td>RF Red Reactor</td>
<td>TIF10 10.7 Mc/s Code Brown</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td></td>
<td></td>
<td>8/6</td>
</tr>
<tr>
<td>(Enamel wires)</td>
<td>TRD10 Ratio Detector Code Yellow</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td></td>
<td></td>
<td>6/6</td>
</tr>
<tr>
<td>Oscillator Coil Code Black</td>
<td>Complete circuit and details free</td>
<td>208+176</td>
<td>470 Kc/s</td>
<td></td>
<td></td>
<td>6/6</td>
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(Use double 15 pf tuner®)
<table>
<thead>
<tr>
<th>Type No.</th>
<th>Colour Code</th>
<th>DESCRIPTION</th>
<th>WAVEBAND Metres.</th>
<th>Tuner pf.</th>
<th>IF Frequency.</th>
<th>Circuit and Sizes</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>XT231</td>
<td>Blue/Mauve</td>
<td>Aerial Coil (SW)</td>
<td>75/170, 4000/1765</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XT232</td>
<td>Blue/Black</td>
<td>HF Coil (SW)</td>
<td>75/170, 4000/1765</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XOT233</td>
<td>Blue/Brown</td>
<td>Oscillator (SW)</td>
<td>75/170, 4000/1765</td>
<td>176</td>
<td>455/475Kc/s.</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XSA34</td>
<td>Red/Yellow</td>
<td>Aerial Coil (SW)</td>
<td>35/75, 850/1765</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XSS35</td>
<td>Blue/Yellow</td>
<td>HF Coil (SW)</td>
<td>35/75, 850/1765</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XO368</td>
<td>Blue/Red</td>
<td>Oscillator (SW)</td>
<td>35/75, 850/1765</td>
<td>176</td>
<td>455/475Kc/s.</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XSA37</td>
<td>Blue/Green</td>
<td>Aerial Coil (SW)</td>
<td>16/36, 19,200/8340</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XSS38</td>
<td>Blue/White</td>
<td>HF Coil (SW)</td>
<td>16/36, 19,200/8340</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>7/6</td>
</tr>
<tr>
<td>XO366</td>
<td>Blue/Red</td>
<td>Oscillator (SW)</td>
<td>16/36, 19,200/8340</td>
<td>176</td>
<td>455/475Kc/s.</td>
<td>+</td>
<td>7/6</td>
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<tr>
<td>XMA41</td>
<td>Two Yellow</td>
<td>Aerial Coil (MW)</td>
<td>190/550, 1580/545</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>6/-</td>
</tr>
<tr>
<td>XMF42</td>
<td>Two Brown</td>
<td>HF Coil (MW)</td>
<td>190/550, 1580/545</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>6/-</td>
</tr>
<tr>
<td>XLA43</td>
<td>Two White</td>
<td>Aerial Coil (LW)</td>
<td>800/2000, 375/150</td>
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<td>—</td>
<td>+</td>
<td>6/-</td>
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<tr>
<td>XLF44</td>
<td>Two Mauve</td>
<td>HF Coil (LW)</td>
<td>800/2000, 375/150</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>6/-</td>
</tr>
<tr>
<td>XO28</td>
<td>Two Black</td>
<td>Oscillator (MW/LW)</td>
<td>190/550, 1580/545</td>
<td>176</td>
<td>455/475Kc/s.</td>
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<td>6/-</td>
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<tr>
<td>XT26</td>
<td>Two Blue</td>
<td>1st and 2nd IFTs</td>
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<td>—</td>
<td>—</td>
<td>+</td>
<td>5/-</td>
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<tr>
<td>XT27</td>
<td>Two Green</td>
<td>Final IFT</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>+</td>
<td>5/-</td>
</tr>
<tr>
<td>XT50</td>
<td>Two Red</td>
<td>1st, 2nd IFT Double Tuned</td>
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<td>—</td>
<td>—</td>
<td>+</td>
<td>5/-</td>
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<tr>
<td>XO15</td>
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<td>Oscillator</td>
<td>190/550, 1580/545</td>
<td>500</td>
<td>455/475Kc/s.</td>
<td>+</td>
<td>6/-</td>
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<tr>
<td>XO8</td>
<td>Red</td>
<td>Oscillator</td>
<td>190/550, 1580/545</td>
<td>176</td>
<td>455/475Kc/s.</td>
<td>+</td>
<td>5/-</td>
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<tr>
<td>XT7</td>
<td>Green</td>
<td>Final IFT</td>
<td>800/2000, 375/150</td>
<td>208</td>
<td>—</td>
<td>+</td>
<td>6/-</td>
</tr>
<tr>
<td>XT8</td>
<td>Blue</td>
<td>1st, and 2nd IFT</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>+</td>
<td>6/-</td>
</tr>
</tbody>
</table>

All parts specified on circuits supplied with above coils and in DBT4 circuits book (Transistor section) are in stock.

Full circuits and details book no. DBT4 1/6 pp. 3d.
### TUNING CONDENSERS

*(Postage and Packing 1/- any type)*

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Description</th>
<th>Price</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>15pf + 15pf</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED FOR FM WITH SLOW MOTION TUNING</td>
<td>9/6</td>
</tr>
<tr>
<td>A</td>
<td>176pf + 176pf</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED WITH SCREEN</td>
<td>7/6</td>
</tr>
<tr>
<td>A</td>
<td>208pf + 176pf</td>
<td>1⅛ x 1⅛ x 1 in. SCREEN AND TRIMMERS</td>
<td>9/6</td>
</tr>
<tr>
<td>A</td>
<td>208pf + 176pf</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED WITH SCREEN</td>
<td>8/6</td>
</tr>
<tr>
<td>A</td>
<td>365pf single</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED</td>
<td>7/6</td>
</tr>
<tr>
<td>A</td>
<td>410pf single</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED</td>
<td>7/6</td>
</tr>
<tr>
<td>A</td>
<td>150pf single</td>
<td>1⅛ x 1⅛ x 1 in. AIRSPACED</td>
<td>9/6</td>
</tr>
<tr>
<td>A</td>
<td>500pf single</td>
<td>AIRSPACED</td>
<td>8/6</td>
</tr>
<tr>
<td>A</td>
<td>365pf + 365pf</td>
<td>1⅛ x 1⅛ x 1⅛ in. AIRSPACED WITH SCREEN</td>
<td>9/-</td>
</tr>
<tr>
<td>A</td>
<td>500pf + 500pf</td>
<td>1⅛ x 1⅛ x 2⅛ in. AIRSPACED WITH SCREEN</td>
<td>9/6</td>
</tr>
<tr>
<td>A</td>
<td>500pf + 500pf</td>
<td>1⅛ x 1⅛ x 2⅛ in. AIRSPACED AND TRIMMERS</td>
<td>7/6</td>
</tr>
<tr>
<td>A</td>
<td>229pf + 111pf</td>
<td>1⅛ x 1⅛ x 1⅛ in. AIRSPACED (similar Plessey 'W')</td>
<td>9/6</td>
</tr>
<tr>
<td>A</td>
<td>208pf + 208pf + 176pf</td>
<td>1⅛ x 1⅛ x 1⅛ in. AIRSPACED SCREEN TRIMMERS</td>
<td>12/6</td>
</tr>
<tr>
<td>A</td>
<td>500pf + 500pf + 500pf</td>
<td>1⅛ x 2⅛ x 3⅛ in. AIRSPACED WITH SCREEN</td>
<td>15/-</td>
</tr>
<tr>
<td>A</td>
<td>350pf + 190pf</td>
<td>WITH SLOW MOTION AND TRIMMERS (HR2)</td>
<td>9/-</td>
</tr>
<tr>
<td>A</td>
<td>500pf + 500pf + 150pf + 150pf</td>
<td>3 x 2⅛ x 1⅛ in. AM/FM GANG GEARED DRIVE</td>
<td>10/-</td>
</tr>
<tr>
<td>A</td>
<td>310pf + 310pf + 310pf</td>
<td>TYPE 'E' THREE GANG 1 ⅛&quot; x 2¼&quot; x 3⅛&quot; long</td>
<td>15/-</td>
</tr>
</tbody>
</table>

### MINIATURE PLASTIC DIELECTRIC TUNERS

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>250pf (Eagle)</td>
<td>⅜ x ⅜ x ⅜ in. diameter spindle tapped 6BA</td>
<td>5/-</td>
</tr>
<tr>
<td>250pf (TSL)</td>
<td>⅜ x ⅜ x ⅜ in.</td>
<td>not tapped</td>
</tr>
<tr>
<td>300pf (Jackson)</td>
<td>⅜ x ⅜ x ⅜ in.</td>
<td>tapped 6BA</td>
</tr>
<tr>
<td>500pf ( )</td>
<td>⅜ x ⅜ x ⅜ in.</td>
<td></td>
</tr>
<tr>
<td>365pf (TSL)</td>
<td>1 x 1 x ⅜ in.</td>
<td></td>
</tr>
<tr>
<td>210 + 90pf</td>
<td>1 x 1 x ⅜ in.</td>
<td></td>
</tr>
<tr>
<td>192pf + 78pf</td>
<td>⅘ x ⅜ x ½ in.</td>
<td>WITH TRIMMERS</td>
</tr>
<tr>
<td>190pf + 190pf</td>
<td>1 x 1 x ⅜ in.</td>
<td>WITH TRIMMERS</td>
</tr>
<tr>
<td>190pf + 190pf</td>
<td>1 x 1 x ⅜ in.</td>
<td>WITH TRIMMERS AND LW SWITCH</td>
</tr>
<tr>
<td>300pf</td>
<td>⅜ x ⅜ x ⅜ in.</td>
<td>tapped 6BA</td>
</tr>
<tr>
<td>* Dial Plate to fit 2/6 extra.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SOLID DIELECTRIC TUNERS

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0001 (100pf)</td>
<td>as illustrated</td>
<td>4/-</td>
</tr>
<tr>
<td>0.0003 (300pf)</td>
<td></td>
<td>4/-</td>
</tr>
<tr>
<td>0.0005 (500pf)</td>
<td></td>
<td>4/-</td>
</tr>
<tr>
<td>0.0005 (500pf)</td>
<td></td>
<td>5/-</td>
</tr>
</tbody>
</table>

*(Square type)*
### Short Wave Tuners

**Airspaced Low Loss**

- 5 pf: 7.5 pf: 10 pf: 15 pf: 3.6 each
- C 804: 100 pf: 5 pf
- C 804: 25 pf: 7.6
- 25 pf and 25 pf Miniature type 3/- each
- Jackson C808 2 x 25 pf Split Stator 10/-
- Jackson C801 15 pf 5/-

### Differential Capacitor

- 25 x 25 pf.
- 7/6

### Miscellaneous

- 6:1 reduction drive 2/6
- Spindle couplers 6d. and 1/-
- 1½ in. spindle extension 1/-

### Airspaced

- Preset tuners
- (as illustrated)
- 20 pf, 50 pf, 75 pf 2/- each

### Trimmers and Padders

**Philips**

- 3-8 pf
- 5-30 pf
- 5-40 pf
- 9d. each

Postage stamp type

- Single hole 2BA fixing
- 100 pf: 250 pf: 1/6 each
- 450 pf: 750 pf
- 30 + 30 pf: 30 + 30 + 30 pf: 1/3

<table>
<thead>
<tr>
<th>Philips 0/50 pf Philips</th>
<th>1/-</th>
</tr>
</thead>
</table>

**Miniature**

- Size 1/2 x 1/4 x 3/4 in.
- 60 pf. or 80 pf
- 1/- each

**Twin Miniatures**

- Two types in stock
- 60÷70 pf and 120÷120 pf
- 1/- each

**Miniature Airspaced**

- 10 pf airspaced (illustrated twice full size)
- 3/-

**SW Ceramic**

- 25 pf
- 35 pf 1/-
- 45 pf each

**Twin Padder**

- 200÷200 pf 1/6

**Airspaced Preset Trimmers**

- 10 pf
- 20 pf 1/6 each
- 25 pf

**Miniature Ceramic**

- 30 x 30 pf 1/-

**Split Stator Preset**

- 2 x 10 pf 2/-

**Miniture Tubular Low Loss**

- (Shown twice actual size)
- 0.5 pf to 3 pf
- 1/- each
- 1 pf to 8 pf

**Quality Components at Value for Money Prices**
### Fixed Condensers

#### Sub-Miniature Electrolytics
<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1mfd</td>
<td>500w</td>
<td>1/9</td>
<td>4mfd</td>
<td>15w</td>
<td></td>
</tr>
<tr>
<td>0.25mfd</td>
<td>250w</td>
<td></td>
<td>8mfd</td>
<td>300w</td>
<td></td>
</tr>
<tr>
<td>0.5mfd</td>
<td>500w</td>
<td></td>
<td>10mfd</td>
<td>500w</td>
<td></td>
</tr>
<tr>
<td>1mfd</td>
<td>250w</td>
<td></td>
<td>15mfd</td>
<td>1500w</td>
<td></td>
</tr>
<tr>
<td>2mfd</td>
<td>100w</td>
<td></td>
<td>25mfd</td>
<td>1500w</td>
<td></td>
</tr>
<tr>
<td>4mfd</td>
<td>6w</td>
<td></td>
<td>30mfd</td>
<td>2500w</td>
<td></td>
</tr>
</tbody>
</table>

**Price:** 1/9 each

#### Miniature Electrolytics—Tubular Wire Ends
<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1mfd</td>
<td>6w</td>
<td>1/6</td>
<td>*1mfd</td>
<td>12w</td>
<td></td>
</tr>
<tr>
<td>2mfd</td>
<td>250w</td>
<td></td>
<td>*1mfd</td>
<td>250w</td>
<td></td>
</tr>
<tr>
<td>*2mfd</td>
<td>12w</td>
<td></td>
<td>*4mfd</td>
<td>500w</td>
<td></td>
</tr>
<tr>
<td>*4mfd</td>
<td>12w</td>
<td></td>
<td>*5mfd</td>
<td>1000w</td>
<td></td>
</tr>
<tr>
<td>*8mfd</td>
<td>12w</td>
<td></td>
<td>*10mfd</td>
<td>2000w</td>
<td></td>
</tr>
</tbody>
</table>

**Price:** 1/6 each

#### Miniature Fixed Condensers
<table>
<thead>
<tr>
<th>Value (pf)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5pf</td>
<td>18p</td>
<td>6d.</td>
</tr>
<tr>
<td>1.0pf</td>
<td>36p</td>
<td></td>
</tr>
<tr>
<td>3.3pf</td>
<td>78p</td>
<td></td>
</tr>
<tr>
<td>4.7pf</td>
<td>78p</td>
<td></td>
</tr>
</tbody>
</table>

**Price:** 6d. each

### Disc Ceramics—Low Voltage
<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3pf</td>
<td>470p</td>
<td>9d.</td>
</tr>
<tr>
<td>4.7pf</td>
<td>680p</td>
<td></td>
</tr>
<tr>
<td>10pf</td>
<td>1200p</td>
<td></td>
</tr>
<tr>
<td>15pf</td>
<td>1500p</td>
<td></td>
</tr>
</tbody>
</table>

**Price:** 6d. each

### Miniature Ceramics
- **1500pf Tapped at 1000pf** and 500pf
- **1000pf Tapped at 500pf**

**Note:** On all condensers listed, the voltage working (Vw) quoted is maximum working. They can be used at any voltage up to the quoted value.

### Standard Condensers
<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1mfd</td>
<td>150w</td>
<td>6d.</td>
</tr>
<tr>
<td>0.1mfd</td>
<td>350w</td>
<td>6d.</td>
</tr>
<tr>
<td>0.1mfd</td>
<td>500w</td>
<td>9d.</td>
</tr>
<tr>
<td>0.25mfd</td>
<td>350w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.5mfd</td>
<td>500w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.5mfd</td>
<td>500w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>500w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>1000w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>1500w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>2000w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>2500w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.01mfd</td>
<td>3000w</td>
<td>1/6</td>
</tr>
<tr>
<td>0.25mfd</td>
<td>500w</td>
<td>2/6</td>
</tr>
<tr>
<td>0.25mfd</td>
<td>1000w</td>
<td>3/6</td>
</tr>
<tr>
<td>0.1mfd</td>
<td>250w</td>
<td>3/6</td>
</tr>
<tr>
<td>1mfd</td>
<td>250w</td>
<td></td>
</tr>
</tbody>
</table>

**Price:** 1/6 each

### TCC Tantelum Capacitors
- **8±16mfd 350w 2/6**
- **16±32mfd 500w 4/6**
- **40±80mfd 500w 6/6**

**Note:** Single hole fixing as illustrated below.

### Block Type
<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2mfd</td>
<td>650w</td>
<td>2/6</td>
</tr>
<tr>
<td>4mf</td>
<td>600w</td>
<td>3/6</td>
</tr>
<tr>
<td>1mf</td>
<td>800w</td>
<td>2/6</td>
</tr>
<tr>
<td>1mf</td>
<td>400w</td>
<td>2/6</td>
</tr>
</tbody>
</table>

**Note:** Every 2mfd above 360w is 1/-

<table>
<thead>
<tr>
<th>Value (mfd)</th>
<th>Voltage (Vw)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8±16mfd</td>
<td>350w</td>
<td>2/6</td>
</tr>
<tr>
<td>16±32mfd</td>
<td>500w</td>
<td>4/6</td>
</tr>
<tr>
<td>40±80mfd</td>
<td>500w</td>
<td>6/6</td>
</tr>
</tbody>
</table>

**Note:** Single hole fixing as illustrated below.

### Block Type
- **TA30AR 1"x1½" diam. 8mfd. 6wv. 3/6**
- **TA34AR 1½"x 1½" diam. 16mfd. 6wv. 3/6**
CONTROLS

MINIATURE, STANDARD AND PRESETS
(Postage and Packing 6d, any type)

STANDARD CARBON TRACK CONTROLS

<table>
<thead>
<tr>
<th>Log less Switch</th>
<th>Linear less Switch</th>
<th>Log with Double Pole Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/6 each</td>
<td>3/6 each</td>
<td>4/6 each</td>
</tr>
</tbody>
</table>

(Switch contacts up to 250 volt 2 Amp.)

All Types approximately \( \frac{1}{4} \) inch diameter \( \times \frac{1}{3} \) inch deep and fitted with \( \frac{1}{4} \) inch diameter standard spindles about \( \frac{3}{4} \) inch long.

GANGED CONTROLS

<table>
<thead>
<tr>
<th>10K + 10K Log</th>
<th>50K + 50K Log</th>
<th>250K + 250K Lin</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/6</td>
<td>6/6</td>
<td>9/6</td>
</tr>
</tbody>
</table>

VC 1545* 5K Semi-Log with Switch \( \frac{3}{4} \times \frac{3}{4} \) inch diameter 5/3

VC 100 10K Semi-Log with Switch \( \frac{3}{4} \times \frac{3}{4} \) inch diameter 5/6

VC 1041* \( \frac{1}{4} \times \frac{1}{4} \) inch diameter 5K Semi-Log with Switch 2/6

VC 1760* \( \frac{1}{4} \times \frac{1}{4} \) inch diameter 5K Semi-Log with Switch 2/6

K4.16 5K Semi-Log with Switch \( \frac{3}{4} \times \frac{3}{4} \) inch diameter 3/6

QUALITY EDGE TYPE CONTROLS

MINIATURE SPINDLE

Semi-Log

Without Switch

1K : 2.5K : 5K : 10K : 25K : 50K : 100K 2/6 each

WIREWOUND CONTROLS AND PRESETS


Preset Type

100 : 500 2/6 each

2K : 5K : 10K 3/- each

CARBON TRACK SLIDER PRESETS

Size 1\( \frac{1}{4} \) \( \times \) 1\( \frac{1}{4} \) inch 3 values in stock

Price 2/- each

RADIO SPARES TYPE SKELETON PRESETS

5K and 20K Ohm 1/6 each.

SUB-MINIATURE CARBON TRACK PRESET CONTROLS

2.5K : 5K : 50K : 250K ALL VALUES 2/- each

50, 100, 250, 330, 500 ohm :


"G" TYPE 1" drum. ALL VALUES 2/- each.

39

STANDARD AND MINIATURE COMPONENTS OF ALL TYPES

(Shown \( \frac{1}{2} \) times full size)
## TRANSFORMERS AND CHOKES FOR TRANSISTOR CIRCUITS

### ARDENTE

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Ratio</th>
<th>Centre Tapped Primary (P) Sec. (S)</th>
<th>Approx. D.C. Resistance</th>
<th>Size (inches)</th>
<th>Description and/or Application</th>
<th>Retail Price</th>
<th>Postage and Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>D129</td>
<td>10:1</td>
<td>—</td>
<td>70H</td>
<td>4.5K</td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D129/T</td>
<td></td>
<td>—</td>
<td>14H</td>
<td>1.2K</td>
<td>115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D189</td>
<td>3.66:1</td>
<td>—</td>
<td>0.6H</td>
<td>185</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D167</td>
<td>18.2:1</td>
<td>—</td>
<td>20H</td>
<td>1.4K</td>
<td>250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D239</td>
<td>4.5:1</td>
<td>—</td>
<td>25H</td>
<td>1.1K</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D240</td>
<td>8.5:1</td>
<td>—</td>
<td>0.5H</td>
<td>110</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D262</td>
<td>10:1</td>
<td>—</td>
<td>12H</td>
<td>2K</td>
<td>180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1001</td>
<td>5:1</td>
<td>—</td>
<td>3 Wdg.</td>
<td>90</td>
<td>43 x 43</td>
<td>1.3 x 1.3</td>
<td></td>
</tr>
<tr>
<td>D3058*</td>
<td>11.5:1</td>
<td>—</td>
<td>80</td>
<td>0.36</td>
<td>1 x 0.093</td>
<td>1 x 0.093</td>
<td></td>
</tr>
<tr>
<td>D3026*</td>
<td>1.6:1</td>
<td>CT (S)</td>
<td>1.8H</td>
<td>200</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3033*</td>
<td>2.75:1</td>
<td>CT (S)</td>
<td>1.3H</td>
<td>90</td>
<td>1</td>
<td>1 x 0.13</td>
<td></td>
</tr>
<tr>
<td>D3027*</td>
<td>9.2:1</td>
<td>CT (P)</td>
<td>0.15H</td>
<td>10</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3027/T</td>
<td></td>
<td>—</td>
<td>3 Wdg.</td>
<td>90</td>
<td>43 x 43</td>
<td>1.3 x 1.3</td>
<td></td>
</tr>
<tr>
<td>D3052*</td>
<td>5.5:1</td>
<td>3 Wdg.</td>
<td>2H</td>
<td>190</td>
<td>45 x 45</td>
<td>1 x 0.13</td>
<td></td>
</tr>
<tr>
<td>D3034*</td>
<td>1.75:1</td>
<td>CT (S)</td>
<td>1.4H</td>
<td>220</td>
<td>0.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3037*</td>
<td>9.2:1</td>
<td>CT (P)</td>
<td>0.35H</td>
<td>10</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3037/T</td>
<td></td>
<td>—</td>
<td>3 Wdg.</td>
<td>90</td>
<td>43 x 43</td>
<td>1.3 x 1.3</td>
<td></td>
</tr>
<tr>
<td>D3035*</td>
<td>7.3:1</td>
<td>CT (P)</td>
<td>0.15H</td>
<td>10</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3011*</td>
<td>4.9:1</td>
<td>CT (P)</td>
<td>0.2H</td>
<td>15</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For all above types: Primary Connections Yellow and Blue; Secondaries Green and Red; Centre Taps White.

* Supplied complete with fixing clamps.

### COLNE ELECTRIC

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Ratio</th>
<th>Centre Tapped Primary (P) Sec. (P)</th>
<th>Approximate D.C. Resistance</th>
<th>Size (inches)</th>
<th>Description and/or Application</th>
<th>Retail Price</th>
<th>Postage and Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>06033</td>
<td>1.75:1</td>
<td>CT (S)</td>
<td>100</td>
<td>60</td>
<td>1 1/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06034</td>
<td>6.2:1</td>
<td>CT (P)</td>
<td>2</td>
<td>0.2</td>
<td>1 1/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05008</td>
<td>1:1</td>
<td>CT (S)</td>
<td>20</td>
<td>20</td>
<td>2 3/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04059</td>
<td>6.4:1</td>
<td>CT (P)</td>
<td>2</td>
<td>0.2</td>
<td>2 3/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05009</td>
<td>3:1+1</td>
<td>3 Wdg.</td>
<td>18</td>
<td>8 1/2 x 8 1/2</td>
<td>2 3/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06040*</td>
<td>Tapped</td>
<td>Choke</td>
<td>Total</td>
<td>700</td>
<td>1 1/8 x 1 1/8 x 1 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06041*</td>
<td>2:1+1</td>
<td>CT (P)</td>
<td>150</td>
<td>20 x 20</td>
<td>1 1/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06043*</td>
<td>3.8+3.8:1</td>
<td>CT (S) and 3:1 (4 wdg.)</td>
<td>3</td>
<td>0.2</td>
<td>2 3/8 x 1 1/8 x 1 1/8 in.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* See GEC Circuit and Bernards Book No. 179 (5/- pp. 6d.) For Transistor Tape Recorders.

** WE CAN ADVISE AS TO THE CORRECT TYPE TO USE IN YOUR CIRCUIT **

11026* (or 06039) and 11027 (or 06042) SEE POT CORES ON PAGE 48.
### REPANCO

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Ratio</th>
<th>Centre Tapped Primary (P)</th>
<th>Approximate D.C. Resistance</th>
<th>Size (inches)</th>
<th>Description and/or Application</th>
<th>Retail Price</th>
<th>Postage and Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT4</td>
<td>1:1</td>
<td>CT (S)</td>
<td>300</td>
<td>12 x 1 x 1 in.</td>
<td>300mW Push-pull Interstage</td>
<td>8.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT5</td>
<td>15:1</td>
<td>CT (P)</td>
<td>70</td>
<td>14 x 1 x 1 in.</td>
<td>300mW Push-pull output to 3 ohms</td>
<td>8.0</td>
<td>6d.</td>
</tr>
<tr>
<td>TT9</td>
<td>1:1</td>
<td>CT (S)</td>
<td>200</td>
<td>12 x 1 x 1 in.</td>
<td>200m Interstage</td>
<td>10.0</td>
<td>6d.</td>
</tr>
<tr>
<td>TT11</td>
<td>3.2:1</td>
<td>CT (S)</td>
<td>20</td>
<td>12 x 1 x 1 in.</td>
<td>2-watt Car Radio Interstage</td>
<td>10.0</td>
<td>9d.</td>
</tr>
<tr>
<td>TT12</td>
<td>3.75:1</td>
<td>CT (P)</td>
<td>3</td>
<td>3 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (12 volt)</td>
<td>12.6</td>
<td>1/3</td>
</tr>
<tr>
<td>TT13</td>
<td>9:1</td>
<td>CT (S)</td>
<td>3</td>
<td>2 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (6 volt)</td>
<td>12.6</td>
<td>1/3</td>
</tr>
<tr>
<td>TT14</td>
<td>4.5:1</td>
<td>CT (P)</td>
<td>1</td>
<td>1 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (6 volt)</td>
<td>12.6</td>
<td>1/3</td>
</tr>
<tr>
<td>TT20</td>
<td>9:1</td>
<td>CT (S)</td>
<td>250</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>3d.</td>
</tr>
<tr>
<td>TT21</td>
<td>1:1</td>
<td>CT (S)</td>
<td>300</td>
<td>12 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (6 volt)</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT22</td>
<td>2:1</td>
<td>CT (P)</td>
<td>2</td>
<td>1 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (6 volt)</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT23</td>
<td>2:1</td>
<td>CT (S)</td>
<td>4</td>
<td>2 x 1 x 1 in.</td>
<td>2-watt Car Radio output to 3 ohms (6 volt)</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT24</td>
<td>2:6:1</td>
<td>CT (S)</td>
<td>1.2</td>
<td>1 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT25</td>
<td>2:1</td>
<td>CT (S)</td>
<td>1.2</td>
<td>1 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT29</td>
<td>3 Wdgs.</td>
<td>CT (S)</td>
<td>250</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>TT39</td>
<td>3:1:1</td>
<td>CT (S)</td>
<td>650</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T51</td>
<td></td>
<td>CT (S)</td>
<td>650</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T52</td>
<td>1.20</td>
<td>CT (S)</td>
<td>200</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T53</td>
<td>3:1:1</td>
<td>CT (S)</td>
<td>1.8</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T55</td>
<td>8.2:1</td>
<td>CT (P)</td>
<td>1.6</td>
<td>12 x 1 x 1 in.</td>
<td>Transistor interstage</td>
<td>12.6</td>
<td>6d.</td>
</tr>
</tbody>
</table>

### OTHER TYPES IN STOCK:

#### WEYRAD—FORTPHONE—GARDENERS—OSMOR—BECLERE ETC.

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Ratio</th>
<th>Centre Tapped Primary (P)</th>
<th>Approximate D.C. Resistance</th>
<th>Size (inches)</th>
<th>Description and/or Application</th>
<th>Retail Price</th>
<th>Postage and Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTI LFDT4</td>
<td>3.5:1</td>
<td>CT (P)</td>
<td>2</td>
<td>1 x 1 x 1 in.</td>
<td>Weyrad push-pull output to 3 ohm</td>
<td>9.6</td>
<td>6d.</td>
</tr>
<tr>
<td>EN1802</td>
<td>4:1</td>
<td>CT (S)</td>
<td>200</td>
<td>1 x 1 x 1 in.</td>
<td>Push-pull interstage primary Green/Red ct. White</td>
<td>7.6</td>
<td>6d.</td>
</tr>
<tr>
<td>EN2082</td>
<td>3:5:1</td>
<td>CT (S)</td>
<td>140</td>
<td>1 x 1 x 1 in.</td>
<td>Single ended Push-pull for 25/35 ohms</td>
<td>8.6</td>
<td>6d.</td>
</tr>
<tr>
<td>PTI*</td>
<td>1.65-1.65:1</td>
<td>CT (P)</td>
<td>0.5</td>
<td>3.5 x 1 x 1 in.</td>
<td>Push-pull for OC22's to 3 ohm</td>
<td>30.0</td>
<td>1/6</td>
</tr>
<tr>
<td>T22</td>
<td>4:1</td>
<td>CT (S)</td>
<td>1000</td>
<td>1 x 1 x 1 in.</td>
<td>Push-pull interstage primary Red/Red</td>
<td>7.0</td>
<td>6d.</td>
</tr>
<tr>
<td>OL130</td>
<td>30:1</td>
<td>CT (S)</td>
<td>700</td>
<td>1 x 1 x 1 in.</td>
<td>To match speaker to transistor input</td>
<td>2.6</td>
<td>6d.</td>
</tr>
<tr>
<td>LT44</td>
<td>4:47:1</td>
<td>CT (S)</td>
<td>2000</td>
<td>1 x 1 x 1 in.</td>
<td>Miniature Push-pull driver</td>
<td>4.6</td>
<td>6d.</td>
</tr>
<tr>
<td>L720</td>
<td>19:4:1</td>
<td>CT (P)</td>
<td>92</td>
<td>1 x 1 x 1 in.</td>
<td>Miniature Push-pull output to 3 ohms</td>
<td>4.6</td>
<td>6d.</td>
</tr>
<tr>
<td>C902</td>
<td>3:5:1</td>
<td>3 Wdgs.</td>
<td>140</td>
<td>1 x 1 x 1 in.</td>
<td>Miniature Push-pull output to 75/80 ohms or 25/35 ohms</td>
<td>6.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T9PA</td>
<td>4:5:1</td>
<td>CT (S)</td>
<td>600</td>
<td>1 x 1 x 1 in.</td>
<td>Weyrad push-pull output to 3 ohm</td>
<td>9.6</td>
<td>6d.</td>
</tr>
<tr>
<td>T9A</td>
<td>4:5:1</td>
<td>CT (P)</td>
<td>600</td>
<td>1 x 1 x 1 in.</td>
<td>Push-pull interstage primary Red/Red</td>
<td>5.6</td>
<td>6d.</td>
</tr>
<tr>
<td>PWDT</td>
<td>CT (S)</td>
<td>100</td>
<td>1 x 1 x 1 in.</td>
<td>Miniature Push-pull output to 3 ohms</td>
<td>8.0</td>
<td>6d.</td>
<td></td>
</tr>
<tr>
<td>PWOT</td>
<td>CT (P)</td>
<td>6</td>
<td>1 x 1 x 1 in.</td>
<td>Primary Brown/Blue, Secondary ct. Red</td>
<td>8.3</td>
<td>6d.</td>
<td></td>
</tr>
<tr>
<td>OX02</td>
<td>CT (S)</td>
<td>2</td>
<td>1 x 1 x 1 in.</td>
<td>Push-pull output to 3 ohms for PWDT</td>
<td>8.3</td>
<td>1/3</td>
<td></td>
</tr>
<tr>
<td>OXD1</td>
<td>CT (S)</td>
<td>6.5</td>
<td>1 x 1 x 1 in.</td>
<td>Driver for above</td>
<td>22.6</td>
<td>6d.</td>
<td></td>
</tr>
<tr>
<td>GR3342</td>
<td>Choke</td>
<td>1.5</td>
<td>1 x 1 x 1 in.</td>
<td>Miniature Filter choke</td>
<td>6.0</td>
<td>6d.</td>
<td></td>
</tr>
</tbody>
</table>

---

* Circuit in Bernards Book No. 176 (6/6— pp. 6/6) | COMPLETE RANGE OF TYPES FOR ALL PURPOSES | 41
LOW VOLTAGE TRANSFORMERS

(See page 28 for suitable miniature rectifiers)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Voltage Range</th>
<th>Current Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT3AT</td>
<td>3½ x 2½ x 3½ inches</td>
<td>0/12/15/20/24/30</td>
<td>up to 2Amp.</td>
<td>Chassis mounting</td>
</tr>
<tr>
<td>MT98</td>
<td>1¾ x 1½ x 1 inches</td>
<td>9-0-9 volt</td>
<td>up to 80mA</td>
<td></td>
</tr>
<tr>
<td>PS24</td>
<td>3½ x 3½ x 2½ inches</td>
<td>17 volt RMS output</td>
<td>To give 24 volt DC supplies.</td>
<td></td>
</tr>
<tr>
<td>PS40/A</td>
<td>3½ x 3½ x 2½ inches</td>
<td>30 volt RMS at 800mA to</td>
<td>To give 40 volt DC supplies.</td>
<td></td>
</tr>
<tr>
<td>PS245</td>
<td>2½ x 2½ x 1½ inches</td>
<td>18 volt RMS at 500mA.</td>
<td>To give 24/28 volt DC supplies.</td>
<td></td>
</tr>
<tr>
<td>PS402/4</td>
<td>2½ x 2½ x 1½ inches</td>
<td>32 volt RMS at 400mA.</td>
<td>To give 40/45 volt DC supplies.</td>
<td></td>
</tr>
<tr>
<td>RADIO SPARES</td>
<td>20-12-0-12-20 volt 700mA OR 0-32-40 volt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESISTORS (post and packing 3d. per dozen)

'HI-STAB' 5 Per Cent
SUB-MINIATURE RESISTORS ½ WATT

<table>
<thead>
<tr>
<th>Resistance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1K</td>
</tr>
<tr>
<td>22</td>
<td>1.2K</td>
</tr>
<tr>
<td>39</td>
<td>1.5K</td>
</tr>
<tr>
<td>47</td>
<td>1.8K</td>
</tr>
<tr>
<td>68</td>
<td>2.2K</td>
</tr>
<tr>
<td>91</td>
<td>2.7K</td>
</tr>
<tr>
<td>100</td>
<td>3.3K</td>
</tr>
<tr>
<td>150</td>
<td>3.9K</td>
</tr>
<tr>
<td>220</td>
<td>4.7K</td>
</tr>
<tr>
<td>330</td>
<td>5.6K</td>
</tr>
<tr>
<td>470</td>
<td>6.8K</td>
</tr>
<tr>
<td>560</td>
<td>8.2K</td>
</tr>
<tr>
<td>680</td>
<td>10K</td>
</tr>
</tbody>
</table>

6d. each

STANDARD MINIATURE

<table>
<thead>
<tr>
<th>Resistance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>120</td>
</tr>
<tr>
<td>3.9</td>
<td>150</td>
</tr>
<tr>
<td>4.7</td>
<td>180</td>
</tr>
<tr>
<td>5.6</td>
<td>220</td>
</tr>
<tr>
<td>10</td>
<td>270</td>
</tr>
<tr>
<td>15</td>
<td>330</td>
</tr>
<tr>
<td>39</td>
<td>390</td>
</tr>
<tr>
<td>47</td>
<td>470</td>
</tr>
<tr>
<td>56</td>
<td>560</td>
</tr>
<tr>
<td>68</td>
<td>680</td>
</tr>
<tr>
<td>82</td>
<td>820</td>
</tr>
<tr>
<td>100</td>
<td>1K</td>
</tr>
</tbody>
</table>

10/- each 30kohm

Note: A limited number of the following values are available at 10/- each:
25 ohm, 100 ohm, 250 ohm, 1K, 5K, 10K, 20K, and 25K ohm.

PRECISION WIREWOUND GEARED PRESET CONTROLS

Gearing approximately 46 turns of end screw to cover full track. Low noise.

SIZE AVAILABLE

10/- each 30kohm

FULLY SEALED WITH 3-LEAD OUT WIRES AND TWO HOLE FIXING. OVERALL SIZE 1½ x ½ x ½ INCHES. MADE BY M.E.C. LTD.

RIVILO PRECISION RESISTORS

5/- each

59K ± 0.1%
250K ± 0.25%
500K ± 0.25%
800K ± 0.25%
1 Meg ± 0.25%

All parts in stock for designs published in Radio Control Models, Radio Constructor, Practical Wireless, Wireless World, RSGB, Shortwave Magazine, Practical Electronics, Hi-Fi News, etc.

Let us quote for components.
SWITCHES

(Postage and packing 6d. any type unless stated)

TOGGLE SWITCHES

Single pole ON/OFF
1 Pole, 2 Way
2 Pole, 2 Way
2 Pole, ON/OFF
ON/OFF Biased
All mains
Voltage
Ratings.

2 pole 2 way with centre off
2 pole ON/OFF Rotary type
(Radio Spares)

2/-
2/-
3/-
2/-
2/-
3/-
2/-
6/6

WAFER SWITCHES (Fitted standard ¼ in. spindle diam.)

1 Pole, 2 Way
2 Pole, 2 Way
2 Pole, 3 Way
2 Pole, 4 Way
2 Pole, 6 Way
1 Pole, 8 Way
1 Pole, 12 Way
3 Pole, 3 Way
4 Pole, 2 Way
4 Pole, 3 Way
4 Pole, 4 Way

2/-
2/-
2/-
3/-
3/-
3/-
3/-
3/-
3/-
3/-
3/-
3/-

6 Pole 2 way push-on release off switch. 2-hole fixing.
Size 1 x 1 x 1 inch.

Price 6/- pp. 6d.

As illustrated.
Two buttons have 3 pole 2 way contacts.
Third has 2 pole ON,OFF push on release off, i.e., Pole 2 way and 2 pole changeover.

2-button 4 pole 2 way version 6/- pp. 6d.
Size 2 x 1½ x 3½ inch.

3/-...
2/-...
3/-...
2/-...
2/-...
3/-...

EDGE TYPE

¾ inch diameter—similar in appearance to Edge Type volume controls (see page 39)

1 Pole, 4-way

2/-

MICRO SWITCHES

Size 2½ x 2½ inch overall
Ball type 1 Pole, 2-way
Push type 1 Pole, 2-way

2/6
2/6

MINIATURE PRESS BUTTON SWITCH UNIT

As illustrated.

2/-...

MINIATURE WAFFER SWITCHES

All Enclosed

(¾ in. diam. ¼ in. diam. spindle).
1 Pole 3 way 2/6
2 Pole 6 way 4/6
1 Pole 12 way 4/6

2/-...

PUSH-BUTTON SWITCHES

Single hole fixing for metal or wood panels (state which)

ON/OFF
PRESET TYPE
Ultra sub-miniature 3/16 x 3/16
1 Pole, 4-way preset

2/-...

1/-

RECTIFIERS

SEE DIODE AND RECTIFIER SECTION ON PAGES 25 AND 26.

SILICON AND GERMANIUM TYPES

RM1
RM2
RM3
RM4

250 volts max. input
125 volts max. input
125 volts max. input
125 volts max. input

250
250
250
250

30mA 1/4
50mA 1/2
60mA 1/4
85mA 1/2
200mA 3/4
300mA 3/4
75mA 1
120mA 1

Half-wave
Full-wave
Full-wave
Bridge connected

4/6
5/-
7/-
7/-
9/-
12/-
15/-

RM1, 2 and 3 are generally used as two in series for 200/250 volts.

CONTACT COOLED (AS ILLUSTRATED)

250 volt max. input

250
250
250
250
250
250
250
250

30mA 1/4
50mA 1/2
60mA 1/4
85mA 1/2
200mA 3/4
300mA 3/4
75mA 1
120mA 1

Half-wave
Full-wave
Full-wave
Bridge connected

5/-
7/-
8/-
9/-
10/-
12/-
15/-

FINNED TYPE

Type 14A6
Type 14A100
STC LU549K
G.E.C.

3 x 2 x 2½ inch
3½ x 2½ x 2½ inch
4 x 1 inch diameter
1½ x 1¼ x 1½ inch

240 volt max. input
270
280
24/28/

200mA half-wave output
200mA
75mA
250mA

20/-
22/-
3/-
3/-

BATTERY CHARGER RECTIFIERS

6/12 volt
6/12 volt
6/12 volt
6/12 volt
6/12 volt
6/12 volt

1 Amp
1 Amp
2 Amp
4 Amp
5 Amp
6 Amp

Half-wave
Bridge (FW)
Bridge (FW)
Bridge (FW)
Bridge (FW)
Bridge (FW)

4/-
7/6
7/6
15/-
17/6
19/6

METER RECTIFIERS

1mA
5mA
10mA
1mA
W6

Bridge connected
Bridge (FW)
Bridge (FW)
Bridge (FW)
W6

9/6
9/6
9/6
1/6
1/6

OTHER TYPES IN STOCK

N3/168 4kv (12kv pulse) 1mA 10kv PIV 12/6
K3/160 4kv (12kv pulse) 1mA 10kv PIV 12/6
J20
J176 15kv 2mA
36 EHT 150
K3/200
H1

5/-
10/-
12/-
15/-
3/-
### Mains Transformers

**ALL STANDARD MAINS INPUT**

#### HT AND LT

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>H.T. Voltage</th>
<th>L.T. Voltage</th>
<th>Current</th>
<th>Mounting</th>
<th>Price</th>
<th>Postage &amp; Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT161</td>
<td>3 ⅔ x 2 ½ x 2 ½ inches</td>
<td>250-0-250 volt</td>
<td>6.3 volts</td>
<td>60 mA</td>
<td>Fully shrouded</td>
<td>25/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT1330</td>
<td>3 ⅔ x 2 ½ x 2 ½ inches</td>
<td>250-0-250 volt</td>
<td>6.3 volts</td>
<td>60 mA</td>
<td>Chassis mounting</td>
<td>22/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT1331</td>
<td>3 ⅔ x 2 ½ x 2 ½ inches</td>
<td>350-0-350 volt</td>
<td>6.3 volts</td>
<td>80 mA</td>
<td>Fully shrouded</td>
<td>22/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT1AT</td>
<td>3 ⅔ x 3 ⅔ x 2 ½ inches</td>
<td>250-0-250 volt</td>
<td>4 volts</td>
<td>80 mA</td>
<td>Drop through</td>
<td>23/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT2AT</td>
<td>3 ⅔ x 2 ¾ x 2 ¾ inches</td>
<td>250-0-250 volt</td>
<td>4 volts</td>
<td>80 mA</td>
<td>Drop through</td>
<td>23/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT146</td>
<td>3 ⅔ x 2 ½ x 2 ½ inches</td>
<td>350-0-350 volt</td>
<td>6.3 volts</td>
<td>80 mA</td>
<td>Fully shrouded</td>
<td>25/-</td>
<td>2/-</td>
</tr>
<tr>
<td>HTSW2</td>
<td>3 ½ x 2 ½ x 2 ½ inches</td>
<td>25-0-250 volt</td>
<td>6.3 volts</td>
<td>Centre Tap</td>
<td>Chassis mounting</td>
<td>20/-</td>
<td>2/-</td>
</tr>
<tr>
<td>MT9</td>
<td>3 ⅔ x 3 ⅔ x 3 inches</td>
<td>280-0-280</td>
<td>6.3 volts</td>
<td>100 mA</td>
<td>Drop through</td>
<td>27/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT10</td>
<td>3 ⅔ x 3 ⅔ x 3 inches</td>
<td>250-0-250</td>
<td>6.3 volts</td>
<td>120 mA</td>
<td>Chassis mounting</td>
<td>29/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT7</td>
<td>3 ⅔ x 3 ⅔ x 3 ¼ inches</td>
<td>350-0-350</td>
<td>6.3 volts</td>
<td>80 mA</td>
<td>Drop through</td>
<td>29/6</td>
<td>2/-</td>
</tr>
<tr>
<td>MT8</td>
<td>3 ⅔ x 3 ¾ x 3 ¾ inches</td>
<td>350-0-350</td>
<td>6.3 volts</td>
<td>120 mA</td>
<td>Chassis mounting</td>
<td>35/-</td>
<td>2/-</td>
</tr>
<tr>
<td>P1</td>
<td>2 ½ x 2 x 2 ½ inches</td>
<td>220 volt</td>
<td>6.3 volts</td>
<td>45 mA</td>
<td>Fully shrouded</td>
<td>14/6</td>
<td>1/-</td>
</tr>
<tr>
<td>P2</td>
<td>2 x 2 x 1 ¾ inches</td>
<td>220 volt</td>
<td>6.3 volts</td>
<td>30 mA</td>
<td>Chassis mounting</td>
<td>10/-</td>
<td>1/-</td>
</tr>
</tbody>
</table>

#### Booster Transformers

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Voltage</th>
<th>Boost</th>
<th>Mounting</th>
<th>Price</th>
<th>Postage &amp; Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT1</td>
<td>2 ½ x 2 x 2 ½ inches</td>
<td>2 volt</td>
<td>25%</td>
<td>Chassis mounting</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>BT2</td>
<td>2 ½ x 2 x 2 inches</td>
<td>6.3 volt</td>
<td>25%</td>
<td>Chassis mounting</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>BT3</td>
<td>2 ½ x 2 x 2 inches</td>
<td>13 volt</td>
<td>25%</td>
<td>Chassis mounting</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>BT5</td>
<td>2 ½ x 2 x 2 inches</td>
<td>Universal type 2/6.3/13 volt</td>
<td>Boost on all taps</td>
<td>Chassis mounting</td>
<td>15/-</td>
<td>1/-</td>
</tr>
</tbody>
</table>

#### Auto Transformers

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Voltage</th>
<th>Watts</th>
<th>Mounting</th>
<th>Price</th>
<th>Postage &amp; Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT15</td>
<td>3 x 3 x 2 ½ inches</td>
<td>0/110/250 volt</td>
<td>15 watts</td>
<td>Sprayed metal box</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>AT60</td>
<td>2 x 2 x 3 inches</td>
<td>0/105/115/120/250 volt</td>
<td>60 watts</td>
<td>Chassis mounting</td>
<td>15/-</td>
<td>2/-</td>
</tr>
<tr>
<td>AT92</td>
<td>4 x 3 ½ x 4 inches</td>
<td>100 volts</td>
<td>0/110/250 volt</td>
<td>Chassis mounting</td>
<td>22/-</td>
<td>2/-</td>
</tr>
</tbody>
</table>

#### Charger Transformers

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Output</th>
<th>Mounting</th>
<th>Price</th>
<th>Postage &amp; Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT1</td>
<td>2 ⅔ x 2 x 1 ½ inches</td>
<td>0/3/5/9/17 volt</td>
<td>1 Amp.</td>
<td>Chassis mounting</td>
<td>10/6</td>
</tr>
<tr>
<td>CT2</td>
<td>3 x 2 ¼ x 2 inches</td>
<td>To charge</td>
<td>2 Amp.</td>
<td>15/-</td>
<td>2/-</td>
</tr>
<tr>
<td>CT3</td>
<td>3 x 2 ¼ x 2 ¼ inches</td>
<td>26/12 volt batteries</td>
<td>4 Amp.</td>
<td>17/6</td>
<td>2/-</td>
</tr>
<tr>
<td>CT4</td>
<td>3 x 2 ¼ x 2 ¼ inches</td>
<td>26/12 volt batteries</td>
<td>6 Amp.</td>
<td>27/6</td>
<td>3/-</td>
</tr>
</tbody>
</table>

#### Heater Transformers

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Output</th>
<th>Price</th>
<th>Postage &amp; Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>2 x 2 x 1 ½ inches</td>
<td>6.3 volt output</td>
<td>1½ Amp.</td>
<td>7/6</td>
</tr>
<tr>
<td>H2</td>
<td>2 ¼ x 2 x 2 inches</td>
<td>6.3 volt output</td>
<td>3 Amp.</td>
<td>10/-</td>
</tr>
</tbody>
</table>
VALVE OUTPUT TRANSFORMERS AND CHOKE

* MULTI-RATIO OUTPUT TRANSFORMER TYPE MR/7
Rating 10 watts. Max. Primary Current Each Half, 80MA.
Size: 2½" high x 3" wide x 2½" deep. Fixing centres 3½".

<table>
<thead>
<tr>
<th>Single Ended Ratios</th>
<th>Push-Pull Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Speaker Impedance</td>
<td>Primary Load 13</td>
</tr>
<tr>
<td>Ratio 2 3/32</td>
<td>Ratio 2 3/32</td>
</tr>
<tr>
<td>9:1</td>
<td>800</td>
</tr>
<tr>
<td>13:1</td>
<td>420</td>
</tr>
<tr>
<td>15:1</td>
<td>360</td>
</tr>
<tr>
<td>19:1</td>
<td>900</td>
</tr>
<tr>
<td>22:1</td>
<td>1200</td>
</tr>
<tr>
<td>23:1</td>
<td>1300</td>
</tr>
<tr>
<td>27:1</td>
<td>1800</td>
</tr>
<tr>
<td>35:1</td>
<td>3000</td>
</tr>
<tr>
<td>43:1</td>
<td>4600</td>
</tr>
<tr>
<td>50:1</td>
<td>6250</td>
</tr>
<tr>
<td>100:1</td>
<td>2500</td>
</tr>
</tbody>
</table>

Using ratios of 13, 19, 23, 30, 43:1, a section of the primary may be used for smoothing.

PRICE 27/- pp. 2/6

* MULTI-RATIO TYPES MR/15 AND MR/30
Ratios available on each type, single ended or push-pull, 13, 16, 18, 20, 22, 27, 33, 40, 52, 66 and 80/1. Primary Loading 2000 to 16000Ω. Secondary impendence 1 to 30Ω. Full instructions with each transformer.

MR/15 watts.
Maximum primary current for single ended stage 90MA.
For Push-Pull stage, 100MA in each half of primary.
Dimensions: 3½" high x 3¼" wide x 2¼” deep
Fixing centres 3½”.
Price 45/- pp. 3/-

MR/30 watts.
Maximum primary current for single ended stage 100MA.
For Push-Pull stage, 100MA in each half of primary.
Dimensions: 3½" high x 3¼" wide x 3¼” deep
Fixing centres 3½”.
Price 55/- pp. 3/6

* MULTI-RATIO OUTPUT TRANSFORMER TYPE MR/T
Ratios 24, 30, 41, 48, 60, 81 and 114 to 1.
Ratios 46, 60, 81 and 114 are centre tapped.
4 watt rating. Maximum DC 50MA.
Price 10/- pp. 11/6

BATTERIES
† Also 006P
Vidor Ever Ready Drydex Voltage Retail Price Postage Contact Clips
VT.1 or T.6001 PP.1 DT.1 6 3/— 6d. 1—
VT.3 or T.6003 PP.3 DT.3 9 2/6 6d. 1—
VT.4 or T.6004 PP.4 DT.4 9 2/6 6d. 1—
VT.5 or T.6005 PP.5 DT.5 9 2/6 6d. 1—
VT.6 or T.6006 PP.6 DT.6 9 2/6 6d. 1—
VT.7 or T.6007 PP.7 DT.7 9 3/6 6d. 1—
VT.8 or T.6008 PP.8 DT.8 9 3/6 6d. 1—
VT.9 or T.6009 PP.9 DT.9 9 3/6 6d. 1—
VT.11 or T.6011 PP.11 DT.11 4½ 5½ 6d. 1—
B.121 15 volts ... 2/— 6d. 1—
B.154 15 ... 2/— 6d. 1—
B.122 2 ½ ... 2/6 6d. 1—
B.123 4d. 1/3
U.2 14 ... 7d. 12d. 6d. 1/3
U.12 14 ... 7d. 12d. 6d. 1/3
D.14 14 ... 4d. 1/3
U.11 14 ... 4d. 1/3
AD.38 7 ½ ... 2/— Plug 6d.

MERCURY BATTERIES
Long life leak proof cells of small size and high capacity.
Maximum recommended current is about 1/10th of rated mA/H.
1.3v, 5000 mA/H | 2 x ½ in. dia. 2 ½/6 p. 6d.
1.3v, 500 MA/H | 2 x ½ in. dia. 1 ½/6 p. 6d.
3.5v, 500 mA/H | 2 x ½ in. dia. 3 ½/6 p. 6d.
7.8v, 500 MA/H | 3 x ½ in. dia. 5 ½/6 p. 1/3
6.9v, 500 MA/H | 3 x ½ in. dia. 12/6 p. 1/3
1.3v, ZM312 Mini-Cell 1 1/11 or 6 for 10/6

SINGLE RATIO OUTPUT TRANSFORMERS

MIDGET FOR PERSONAL PORTABLES.
DL SERIES AND 3 V4 ETC. TO 3 OHM 4/6
Postal and Packing 9d.

STANDARD PENTODE 65:1 AND
40mA to 3 OHM SPEAKER 4/6
Postal and Packing 9d.

AS ABOVE BUT 60MA, 55:1 4/6
Postal and Packing 9d.

SINGLE 6V6 OR SIMILAR RATIO 15:1
at 40mA to 15 OHM 4/6
Postal and Packing 9d.

MIDGET OL130 FOR 10mA
3 OHM SPEAKER 30:1 2/6
Postal and Packing 6d.

4:1 INTERVALVE TRANSFORMER 7—
Postal and Packing 6d.

CHOKES

1.5 Henry, 6½ ohms, 300MA.
Price 17/6 Post Free

GARDENERS 'C' CORE CHOKE

MIDWEST C.6000 TRANSFORMER 60/1
3 OHM SPEAKER 30:1 4/6
Postal and Packing 6d.

*State Battery Type.

SEE PAGE 49 FOR BATTERY ELIMINATORS

45
## Miniature and Standard Speakers

- **Brand New — Fully Guaranteed**
- **Large Magnets — High Sensitivity**

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Diameter</th>
<th>Depth</th>
<th>Resistance</th>
<th>Price</th>
<th>Postage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plessey</td>
<td>2 1/8 in round</td>
<td>1 3/8 in deep</td>
<td>8/10 ohms</td>
<td>15/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>35 ohms</td>
<td>15/-</td>
<td>2/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>75/80 ohms</td>
<td>15/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Eagle</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>3 ohms</td>
<td>16/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Eagle</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>8/10 ohms</td>
<td>16/6</td>
<td>1/-</td>
</tr>
<tr>
<td>EMI</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>3 ohms</td>
<td>14/6</td>
<td>1/-</td>
</tr>
<tr>
<td>EMI</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>3/5 ohms: Tweeter</td>
<td>17/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Eagle</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>75/80 ohms</td>
<td>9/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>2 1/8 in square</td>
<td>1 3/8 in deep</td>
<td>3 ohms</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>ELAC</td>
<td>3 1/8 in round</td>
<td>1 3/8 in deep</td>
<td>3 ohms</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>ELAC</td>
<td>3 1/8 in round</td>
<td>1 3/8 in deep</td>
<td>25 ohms</td>
<td>19/6</td>
<td>1/-</td>
</tr>
<tr>
<td>W.B.</td>
<td>3 1/8 x 2 inch elliptical</td>
<td>1 3/8 in deep</td>
<td>3 ohms</td>
<td>30/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>6 1/2 in round</td>
<td>2 1/8 in deep</td>
<td>3 ohms</td>
<td>12/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>6 1/2 x 2 inch elliptical</td>
<td>2 1/8 in deep</td>
<td>3 ohms</td>
<td>15/-</td>
<td>1/6</td>
</tr>
<tr>
<td>Plessey</td>
<td>8 1/2 in round</td>
<td>3 1/8 in deep</td>
<td>3 ohms</td>
<td>18/6</td>
<td>1/6</td>
</tr>
<tr>
<td>Plessey</td>
<td>8 1/2 x 2 inch elliptical</td>
<td>3 1/8 in deep</td>
<td>3 ohms</td>
<td>25/-</td>
<td>2/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>10 1/2 in round</td>
<td>3 1/8 in deep</td>
<td>3 ohms</td>
<td>16/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>5 x 3 1/2 in elliptical</td>
<td>1 3/8 in deep</td>
<td>25/35 ohms</td>
<td>17/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>5 x 3 1/2 in elliptical</td>
<td>1 3/8 in deep</td>
<td>25/35 ohms</td>
<td>17/6</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>5 x 3 1/2 in elliptical</td>
<td>1 3/8 in deep</td>
<td>25/35 ohms</td>
<td>20/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>7 x 3 1/2 in elliptical</td>
<td>1 3/8 in deep</td>
<td>15 ohms</td>
<td>20/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>7 x 3 1/2 in elliptical</td>
<td>1 3/8 in deep</td>
<td>20/-</td>
<td>1/-</td>
<td></td>
</tr>
<tr>
<td>ELAC</td>
<td>7 x 4 1/2 in</td>
<td>2 1/8 in deep</td>
<td>3 ohms</td>
<td>15/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>7 x 4 1/2 in</td>
<td>2 1/8 in deep</td>
<td>30/35 ohms</td>
<td>20/-</td>
<td>1/-</td>
</tr>
<tr>
<td>Plessey</td>
<td>8 x 5 1/2 in</td>
<td>2 1/8 in deep</td>
<td>25/35 ohms</td>
<td>22/6</td>
<td>1/6</td>
</tr>
<tr>
<td>Plessey</td>
<td>10 x 6 1/2 in</td>
<td>2 1/8 in deep</td>
<td>3 ohms</td>
<td>22/6</td>
<td>1/6</td>
</tr>
<tr>
<td>Plessey</td>
<td>12 x 6 1/2 in</td>
<td>2 1/8 in deep</td>
<td>3 ohms</td>
<td>27/6</td>
<td>1/6</td>
</tr>
<tr>
<td>RA</td>
<td>12 inch round with HF Cone</td>
<td>3 1/8 in deep</td>
<td>15/16 ohms</td>
<td>35/-</td>
<td>3/-</td>
</tr>
<tr>
<td>EMI</td>
<td>13 1/8 x 8 1/2 in elliptical</td>
<td>3 ohms</td>
<td>39/6</td>
<td>2/6</td>
<td></td>
</tr>
<tr>
<td>EMI</td>
<td>13 1/8 x 8 1/2 in elliptical</td>
<td>15 ohms</td>
<td>39/6</td>
<td>2/6</td>
<td></td>
</tr>
</tbody>
</table>

## Stereo Record Player Amplifier

**Special Offer**

**Stereo Record Player Amplifier**

- A well-built stereo amplifier supplied by a well-known British firm.
- Uses ECC83 and 2-ECL82 valves with sufficient output on each channel for portable or home use.
- Incorporates new high gain circuit with tone balance and volume controls.
- Supplied built and tested with speaker sockets, mains leads, calibrated dials, etc., output is to 3 ohms. Standard 200/250 volt AC mains.
- **Fully Guaranteed 79/6 p.p. 3/6**

- Suitable 8 x 5 inch Speakers 22/6 each
- or 7 x 4 inch Speakers 15/- each
MOULDED RADIO CABINETS

REXINE COVERED WOOD RADIO CABINET
Two Colour with Handle for 5 inch speaker. Fitted controls bracket. Size 9 ½ x 5 ½ x 3 ½ in. Complete with 2 ½ in. Dial Plate, 2 Knobs. As used for Transivic Portable, see page 4...

As above suitable for Weyral and other designs. With 2 knobs and dial set...

Moulded plastic speaker baffle or cabinet front. Overall size 12 ½ x 5 ½ fitted 4BA tapped screw inserts. Particularly suitable for 7 x 4 in. speakers only...

5½ x 3 ½. Fine mesh gold grills...

SEE PAGE 56 FOR SPEAKER CABINETS. PAGE 40 FOR VERNIER DIALS

READY TO USE PRINTED CIRCUIT PANELS—ALL PARTS IN STOCK FOR BUILDING

<table>
<thead>
<tr>
<th>Size</th>
<th>Transistor Type</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 x 2 ½ inches</td>
<td>5 Transistor MW/LW Radio.</td>
<td>(Diagram free)</td>
<td>7/6</td>
</tr>
<tr>
<td>8½ x 3 ½</td>
<td>6</td>
<td>MW/LW</td>
<td>9/6</td>
</tr>
<tr>
<td>8½ x 3 ½</td>
<td>6</td>
<td>MW/SW</td>
<td>9/6</td>
</tr>
<tr>
<td>6 x 4 ½</td>
<td>6</td>
<td>MW/LW</td>
<td>10/–</td>
</tr>
<tr>
<td>9½ x 4 ½</td>
<td>5</td>
<td>MW/LW</td>
<td>10/–</td>
</tr>
<tr>
<td>3 x 2 ½</td>
<td>6</td>
<td>Amplifier</td>
<td>17/6</td>
</tr>
<tr>
<td>5 x 3 ½</td>
<td>6</td>
<td>Amplifier</td>
<td>17/6</td>
</tr>
<tr>
<td>3 ½ x 3 ½</td>
<td>4</td>
<td>Amplifier</td>
<td>17/6</td>
</tr>
<tr>
<td>4 x 2 ½</td>
<td>2</td>
<td>Preamp.</td>
<td>17/6</td>
</tr>
<tr>
<td>Two Boards</td>
<td></td>
<td></td>
<td>17/6</td>
</tr>
<tr>
<td>5 x 2 ½ in.</td>
<td></td>
<td></td>
<td>17/6</td>
</tr>
</tbody>
</table>

NEW ITEMS ARRIVING EVERY DAY. IF YOU CANNOT FIND WHAT YOU REQUIRE IN THIS CATALOGUE, DO NOT HESITATE TO CONTACT US.

KNOWS

- a) Ivory skirted knob 1 inch with gold centre and marker spot on skirt...
- b) Gold centre knob 1 inch brown or cream...
- c) 1 inch brown with gold centre with arrow...
- d) 1½ inch brown knob with gold ring...
- e) 2 inch version of (d) with gold ring...
- f) ½ inch ribbed black instrument knob...
- g) Black pointer knob...

ALLO KNOWS FOR STANDARD ½ INCH SPINDLE

(Diagram types vary depending upon availability)

DIAL SETS

ALL FOR ½ INCH STANDARD SPINDLES

- 1. ½ inch plastic black with white lettering, complete with dial butt 6BA...
- 2. 3 ½ inch clear plastic plate with gold paper station plate and 6BA butt...
- 3. 3 ½ inch clear plastic gold rimmed dial plate with gold paper station plate and two matching knobs...
- 4. Horizontal dial set with all fittings...

MOULDED BOXES WITH HINGE LIDS

(p.p. 6d. any type)

- 2½ x 1½ x 2 inches...
- 2½ x 1½ x 2 inches...
- 3 x 2 ½...
- 4½ x 3 ½...
- 5½ x 3 ½...

PUNCH BOARD

Size 4 x 3½ inch. 1400 holes...

PTFE FEED THRU INSULATORS

Price 3/6 Dozen.

TAG BOARDS

- 2½ x 1½ inches Double 8 way...
- ¾ x ¾...
- ½ x ½...

TAG STRIP

28 way Price 1/6d.

PRINTED CIRCUIT PANEL

Radio-Spares universal transistor panel. Pre-drilled and tinned. For up to 8 transistors. Size 6 x 2 inches.

Price 3/- each or 8/6 per Three.
**MULLARD FERRITE POT CORES AND NEOSID FORMERS**

FOR TRANSFORMERS — CHOKES — FILTERS ETC.
(SEE PAGE 31 FOR CHOKES AND FERRITE RODS)

<table>
<thead>
<tr>
<th>LA1</th>
<th>Size</th>
<th>1(\frac{1}{4}) x 1(\frac{1}{4}) x (\frac{1}{4}) inch. For use up to 30 kc/s. Effective permeability 110. Maximum 'Q' at 25 kc/s is 325. Number of turns for 1mH are 52. 12/6 pp. 6d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA2</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x 1(\frac{1}{4}) inch. For use up to 100 kc/s. Effective permeability 60. Maximum 'Q' at 80 kc/s is 475. Number of turns for 1mH are 45. 15/- pp. 6d.</td>
</tr>
<tr>
<td>LA3</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x 1(\frac{1}{4}) inch. For use up to 500 kc/s. Maximum 'Q' at 200 kc/s is 525. Maximum permeability is 40. Number of turns for 1mH are 85. 19/6 pp. 6d.</td>
</tr>
<tr>
<td>LA4</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x (\frac{1}{4}) inch. For use up to 30 kc/s. Maximum permeability 60. Maximum 'Q' at 25 kc/s is 425. Number of turns for 1mH are 54. 12/6 pp. 9d.</td>
</tr>
<tr>
<td>LA5</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x 1(\frac{1}{4}) inch. For use up to 100 kc/s. Maximum permeability 35. Maximum 'Q' at 80 kc/s is 575. Number of turns for 1mH are 70. 17/6 pp. 9d.</td>
</tr>
<tr>
<td>LA6</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x 1(\frac{1}{4}) inch. For use up to 500 kc/s. Effective permeability 20. Number of turns for 1mH are 92. 22/6 pp. 9d.</td>
</tr>
<tr>
<td>LA9</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x (\frac{1}{4}) inch. (17/6 pp. 9d.</td>
</tr>
<tr>
<td>LA10</td>
<td>Size</td>
<td>1(\frac{1}{4}) x 1(\frac{1}{4}) x 1(\frac{1}{4}) inch (17/6 pp. 9d.</td>
</tr>
</tbody>
</table>

**MINIATURE POT CORE**

- Type FX1011.
- Size \(\frac{1}{16}\) inch diameter x \(\frac{1}{8}\) inch deep.
- Price 7/6

Complete with former.

**ADJUSTABLE POT CORES**

Overall size \(\frac{1}{2}\) x \(\frac{1}{2}\) inch diameter.
Single hole fixing with tag plate.
Complete with bobbin and core giving \(\pm 7\%\) variation.

| LA2503 | For use up to 100 Kc/s. Effective permeability 160. Maximum 'Q' is 350 at 30 Kc/s. Number of turns for 1mH are 52. 15/- pp. 9d. |
| LA2504 | For use up to 100 Kc/s. Effective permeability 100. Maximum 'Q' is 300 at 35 Kc/s. Number of turns for 1mH are 66. 15/- pp. 9d. |
| LA2505 | For use up to 200 Kc/s. Maximum 'Q' at 200 Kc/s is 400. Number of turns for 1mH are 84. Effective permeability 63. 17/6 pp. 9d. |

**WOUND POT CORES**

| **06039**—Tape circuit treble boost inductor. Code 11026, wound on LA2503 | 35/- pp. 1/- |
| **06042**—2 watt tape oscillator for collaroh heads. Code 11027, wound on LA2305 | 45/- pp. 1/- |
| **06044**—As 06042 but for truvox heads. Code 11028 | 45/- pp. 1/- |
| **4385** Treble boost inductor 370mH 45 ohm (Replaces 06039) | 17/6 pp. 9d. |
| **4379** 2 watt push-pull tape circuit oscillator wound on LA2 pot core (Replaces 06042) | 32/6 pp. 9d. |

**DENCO NEOSID POT CORE**

(ILLUSTRATION LARGER THAN FULL SIZE)

- Type 10D assembly with bobbin and tuning slug \(3/6\)
- \(\frac{1}{4}\) inch coil former \(9d.\)
- Iron dust slug \(6d.\)
- \(\frac{1}{2}\) \(9d.\)
- CHL Choke core \(\frac{7}{6}\) x \(\frac{1}{2}\) diameter \(6d.\)

**FEW ONLY**

- LA2403 adjustable pot core \(15/- pp. 9d.\)
- LA45 pot core \(15/- pp. 6d.\)

**LARGE RANGE OF MINIATURE COMPONENTS FOR MODEL CONTROL**
### CAR RADIO AERIALS

All types are heavily chromed plated, telescopic and supplied fitted with plug.
(Postage and packing 1/6 any type)

- **A.** 3-section single hole wing or boot mounting... 19/6
- **B.** 3-section with angled ball joint, clips on to window, no holes, easily removed in seconds... 27/6
- **C.** 2-section car aerial clips to roof gutter. Special head passes into car via window top... 27/6
- **D.** Multi-purpose type for window fitting also for domestic FM and TV... 21/6
- **E.** New fully disappearing thieve proof type. Single hole wing fixing with key... 39/6

### TELESCOPIC AERIALS

For medium wave, short wave, amateur band receivers, transmitters, model control, instruments etc. etc.

- **A.** 3½ in. closed, 14 in. extended... 3/6
- **B.** 6½... 38½... 6/6
- **C.** 6... 42... 10/6
- **D.** 8... 64... 17/6
- **E.** 7 in. closed... 25... 4/6

Types 'A' and 'B' are supplied with a threaded end with 4BA nut.
Type 'C' fitted side clips as illustrated.
Type 'E' has threaded sliding base.

Post and packing 9d. any type.

**HEAVY PLATE FINISH ENHANCE THE APPEARANCE OF ANY EQUIPMENT.**

### 9-Volt ALL-PURPOSE BATTERY ELIMINATOR

**FULLY MAINS ISOLATED**

Replaces PP4, PP7, PP9, etc.
(or similar in other makes)

For any application requiring 9 volts up to 300 mA. Fully mains isolated and screened. Operates from 200/250 volt mains.

Size 3½ x 3½ x 2½ inches... 49/6 pp. 2/6

Suitable for all transistor radios, recorders, amplifiers, record players, equipment etc., requiring 9 volts up to 300 mA.

### BATTERY ELIMINATOR AND CHARGER

For PP3 or VT3 or similar 9-volt unit replacing above batteries. Enables your pocket radio to operate from 220/240 volt mains. Also charges above batteries for five times normal life.

19/6 pp. 1/6

Complete with Full Details

### PP3 9-VOLT ELIMINATOR

(Or T5003 or VT3 or DT3 or similar)

Replaces any 9-volt battery as above, as used in most pocket transistor radios today. Just unclip the battery, clip in the eliminator and plug into standard mains socket.

**PETITE FULMETER**

18/6 pp. 1/6

SAVE BATTERIES, RUN YOUR RADIO FROM MAINS.

### SPECIAL EQUIPMENT OFFER

**FM TRANSMITTERS RECEIVERS**

Ex. R. A. F. 2 METRE EQUIPMENT.

**Type 1934** 100 to 125 mc/s.
**Type 1935** 124.5 to 150 mc/s.

- Contains Receiver Unit
  - 10.7 mc/s. IF Unit
  - Transmitter Unit
  - Modulator Unit

In new condition complete in casing—less valves.

**PRICE 15/- CARRIAGE 7/6**

---

**LET US QUOTE FOR COMPONENTS AND EQUIPMENT FOR YOUR CIRCUITS**
**CHASSIS PUNCH KIT IN CARRY CASE**

Five of the most used hole punches, made from hardened steel, will save hours of drilling and filing. Suitable for aluminium, duralumin, mild steel up to 16 gauge, also plastics etc. Punch sizes, \( \frac{1}{2} \text{in.} \), \( \frac{3}{8} \text{in.} \), \( \frac{1}{4} \text{in.} \). Supplied complete with Tommy bar, tapered reamer and zip fastening carry case.

All as illustrated above.

52/6 pp. 1/6

---

**MODEL SFI SOLDERING GUN**

**HIGH SPEED INSTANT HEAT SOLDERING GUN.**

Price 42/6 Post Free

---

**MULTICORE SOLDER**

- 6d., 1/-, 2/6, 5/- packs of multicore solder ready fluxed. p.p. 6d. per pack.
- Special low temperature printed circuit solder 1/- per 10ft. p.p. 6d.
- Multicore 'SAVBIT' solder 2/6 per tube pp. 6d.

---

**BIB WIRE CUTTERS AND STRIPPERS**

For stripping back wire insulating and for cutting.

3/6 pp. 9d.

---

**Enamelled copper wire**

14 S.W.G. 2 oz. 2/- 28 S.W.G. 2 oz. 2/6
16 ... 2/- 30 ... 2/6
18 ... 2/- 32 ... 2/6
20 ... 2/- 34 ... 2/6
22 ... 2/- 36 ... 2/6
24 ... 2/- 38 ... 2/6
26 ... 2/- 40 ... 2/6

*Postage and packing 6d. per reel.*

---

**Tinned copper wire**

4 oz. reels: 18 S.W.G. 3/-; 20 S.W.G. 3/2;
22 S.W.G. 3/2; 24 S.W.G. 3/5; 26 S.W.G. 3/5

Low loss coax cable ... 9d. yard or 8/- dozen

---

**SPECIAL OFFER**

100 yard reels PTFE covered Stranded Hook-up wire

12/6

---

**TRANSISTOR BATTERY CLIPS**

- Single clips (As left) for PP1, PP4, PP7, PP9, VT4, VT7, VT9 etc. Batteries ... 1/- pair
- Single clips (smaller than above) for PP3, PP5, PP6, VT3, VT5, VT6 etc. type batteries ... 1/- pair
- OR single plate as right centre for PP3, VT3, PP6, VT6 1/-
- 4-Pin plug for PP11, VT11 etc. ... 6d.
- 2-Pin for AD38 ... 1/-

---

**BATTERY CLIPS MOULDED TYPE WITH LEADS FOR PP3, VT3, PP6, VT6 ETC. BATTERIES.**

PRICE 1/6
ANTEX PRECISION MINIATURE SOLDERING IRON

A physically robust iron of very small dimensions. Available for 220/250 volt, 6 and 12 volts AC/DC.

This iron is only 6¼" long and weighs less than 1 ounce, but has the attributes of many larger irons and has fully insulated element. These have been introduced to meet the growing demand created by the rapid development of partly or wholly transistorised circuits and the growing use of miniature components. These irons are fitted with 3/32 inch bit. Alternative bits are available as additional items. The iron features quick release/ready changeable bits and quick warm-up time.

- 15 watt 220/250 volts AC/DC antex iron fitted 3/32" bit 29/6 pp. 1/6
- 6 volt and 12 volt AC/DC iron 3/32" bit .... 25/- pp. 1/6

SPARES FOR ANTEX IRONS

<table>
<thead>
<tr>
<th>Bits</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1mm</td>
<td>3/6 each</td>
</tr>
<tr>
<td>2mm</td>
<td>3/6 each</td>
</tr>
<tr>
<td>3/32&quot;</td>
<td>3/6 each</td>
</tr>
<tr>
<td>5/32&quot;</td>
<td>3/6 each</td>
</tr>
<tr>
<td>3/16&quot;</td>
<td>3/6 each</td>
</tr>
</tbody>
</table>

Elements for 220/250 volt irons ....... 15/-
Slide on wire stripper 1/- .... Heat sink tweezers 1/6
Hanging clip .... 1/6 (For transistor soldering)

SOLON SPARES

- Elements for 25 watt iron .... 5/6
- Elements for 15 watt iron .... 15/-
- Spare bits for both types .... pair 2/6

SOLON INSTRUMENT SOLDERING IRON

Specially designed for soldering operations in the compact assemblies employed in present day radio and television, electronic and allied industries. 25 watts. ½" dia. bit. Weight 3½ ozs. Also 15 watt version with ¼" dia. bit. Both types for 230/250 volts.

- 'SOLON' 230/250v. AC/DC 15 watts (¾ in.) 22/6 p.p. 1/6

ARIS UNIVERSAL TEST LEAD KIT IN PLASTIC CASE

Consists of 4½in. long X 3½in. diameter red and black plastic handle pin probes. With heavy duty 37in. rubber leads with 5000v. breakdown insulation terminating 2in. long X ¾in. dia. plastic grip banana plugs. 3 sets of interchangeable terminals are included (spade lugs, phone tips, alligator clips), all slip directly over banana plugs.

only 9/6 p.p. 9d.

SOLDERING IRONS

ANTEX PRECISION IRON

POCKET IRON

SOLON IRON

POCKET IRON (Model SFI)

30 watt portable soldering iron. Fitted tapered bit for miniature work. Features are movable handle which screw over the bit to enable iron to be carried even when hot. Complete with vinyl bag, lead and plug. 14/6 p.p. 1/-

POCKET IRON SPARES

Element 4/6 Bits 1/6

'PIFCO' 30 watt soldering iron with ¼" bit. 230/250 volts. Fitted foldaway stand and work light 22/6 p.p. 1/6

"Q MAX" CHASSIS CUTTERS

For all sheet metal and alloys up 16 gauge mild steel

SOLDERING IRONS — TEST LEADS KIT — PUNCHES — SPARES — 51
<table>
<thead>
<tr>
<th>ACCESSORIES</th>
<th>INCLUDING ALL TYPES OF PLUGS AND SOCKETS, TAG STRIPS, CHASSIS BOARDS, SPEAKER FRET, CLIPS ETC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wander plugs Standard size in red, blue, yellow, white or black</td>
<td>6d.</td>
</tr>
<tr>
<td>2. Sub-miniature size red or black</td>
<td>6d.</td>
</tr>
<tr>
<td>3. Sockets for (1)</td>
<td>6d.</td>
</tr>
<tr>
<td>4. Sockets for (2)</td>
<td>6d.</td>
</tr>
<tr>
<td>5. 4mm Banana Plugs, various colours</td>
<td>6d.</td>
</tr>
<tr>
<td>6. Insulated Sockets for (5)</td>
<td>6d.</td>
</tr>
<tr>
<td>7. Line Sockets for (5)</td>
<td>6d.</td>
</tr>
<tr>
<td>8. 2.5mm Banana Plugs, various colours</td>
<td>6d.</td>
</tr>
<tr>
<td>9. Line Sockets for (8)</td>
<td>6d.</td>
</tr>
<tr>
<td>10. Insulated Phono Plugs various colours</td>
<td>9d.</td>
</tr>
<tr>
<td>11. All Metal Phono Plugs</td>
<td>6d.</td>
</tr>
<tr>
<td>12. Phono Line Sockets, various colours</td>
<td>1/-</td>
</tr>
<tr>
<td>13. Panel Mounting Phono Sockets</td>
<td>6d.</td>
</tr>
<tr>
<td>14. Dual Phono Socket</td>
<td>1/-</td>
</tr>
<tr>
<td>15. 4 way Phono Socket</td>
<td>1/9</td>
</tr>
<tr>
<td>16. Car Radio Aerial Plug</td>
<td>1/6</td>
</tr>
<tr>
<td>17. Socket for above (16)</td>
<td>1/3</td>
</tr>
<tr>
<td>18. Belling Screened Coax Plug</td>
<td>1/3</td>
</tr>
<tr>
<td>19. Solderless Coax Plug</td>
<td>1/-</td>
</tr>
<tr>
<td>20. Coax Socket Standard</td>
<td>1/-</td>
</tr>
<tr>
<td>21. Coax Socket Flush Mounting</td>
<td>1/3</td>
</tr>
<tr>
<td>22. Female Coax Screened Plug</td>
<td>1/6</td>
</tr>
<tr>
<td>23. Spade Terminal Red or Black</td>
<td>6d.</td>
</tr>
<tr>
<td>24. Brass Panel Mounting Terminals</td>
<td>9d.</td>
</tr>
<tr>
<td>25. Insulated Red or Black type Terminals</td>
<td>1/-</td>
</tr>
<tr>
<td>26. Quartz Crystal Sockets, all single hole fixing 1/2 inch Spacing</td>
<td>HC6U or 2M</td>
</tr>
<tr>
<td></td>
<td>FT24/A or FT243</td>
</tr>
<tr>
<td></td>
<td>10XJ or DC34</td>
</tr>
<tr>
<td></td>
<td>10X</td>
</tr>
<tr>
<td>Double type for 10X or 10XJ.</td>
<td></td>
</tr>
<tr>
<td>ALL TYPES</td>
<td>1/- EACH.</td>
</tr>
<tr>
<td>27. Miniature Pye Plugs</td>
<td>2/6</td>
</tr>
<tr>
<td>28. Miniature Pye Sockets</td>
<td>1/6</td>
</tr>
<tr>
<td>29. Miniature Pye Plug Line Connectors</td>
<td>2/6</td>
</tr>
<tr>
<td>30. B9A 9 pin miniature plugs</td>
<td>2/-</td>
</tr>
<tr>
<td>31. B7G 7 pin miniature plugs</td>
<td>2/-</td>
</tr>
<tr>
<td>32. Miniature paxolin base plugs and sockets 2 pin 'M2' 1/2 inch.</td>
<td>PLUGS</td>
</tr>
<tr>
<td>3 pin 'M3A'</td>
<td>6d.</td>
</tr>
<tr>
<td>2 pin 'S2' 1/2 inch.</td>
<td>SOCKETS</td>
</tr>
<tr>
<td>4 pin 'M4'</td>
<td>9d.</td>
</tr>
<tr>
<td>5 pin 'M5'</td>
<td>9d.</td>
</tr>
<tr>
<td>33. 2 pin paxolin socket for speakers etc. Takes wander plug</td>
<td>9d.</td>
</tr>
<tr>
<td>34. Jack plug 1/2 inch standard</td>
<td>2/6</td>
</tr>
<tr>
<td>35. As (34) but fully screened</td>
<td>3/6</td>
</tr>
<tr>
<td>36. Single hole fixing socket for (34)</td>
<td>2/-</td>
</tr>
<tr>
<td>37. As (35) but with circuit breaker</td>
<td>2/3</td>
</tr>
<tr>
<td>38. 2.5mm Jack plug</td>
<td>1/6</td>
</tr>
<tr>
<td>39. Socket with cut out switch for (38)</td>
<td>1/6</td>
</tr>
<tr>
<td>40. (38) and (39) together</td>
<td>2/6</td>
</tr>
<tr>
<td>41. 3.5mm Jack plug</td>
<td>1/6</td>
</tr>
<tr>
<td>42. Socket with cutout for (41 or 44)</td>
<td>1/6</td>
</tr>
<tr>
<td>43. (41) and (42) together</td>
<td>2/6</td>
</tr>
<tr>
<td>44. 3.5mm Screened jack plug</td>
<td>1/-</td>
</tr>
<tr>
<td>45. (44) and (42)</td>
<td>3/-</td>
</tr>
<tr>
<td>46. Transistor sockets 3 pin and 5 pin</td>
<td>9d. each or 8/- dozen.</td>
</tr>
<tr>
<td>47. Hearing Aid Socket. Takes 2 pin hearing aid type plug</td>
<td>2/6</td>
</tr>
<tr>
<td>48. Bulgin 2 pin mains plug and socket—Flush mounting</td>
<td>4/-</td>
</tr>
<tr>
<td>49. As (48) but 3 pin</td>
<td>4/6</td>
</tr>
<tr>
<td>50. Octal Female Plugs</td>
<td>1/6</td>
</tr>
<tr>
<td>51. Post Office 3 way jack plug</td>
<td>1/6</td>
</tr>
<tr>
<td>52. 3 way socket for above</td>
<td>1/-</td>
</tr>
<tr>
<td>53. Valve sockets—See Page</td>
<td></td>
</tr>
<tr>
<td>54. Miniature 7 pin plug and socket plated contacts, with plug cover</td>
<td>5/6</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>60.</td>
<td>Continental 3 pin chassis socket (for 64)</td>
</tr>
<tr>
<td>61.</td>
<td>5 pin chassis socket (for 65)</td>
</tr>
<tr>
<td>62.</td>
<td>3 pin line socket (for 64)</td>
</tr>
<tr>
<td>63.</td>
<td>5 pin line socket (for 65)</td>
</tr>
<tr>
<td>64.</td>
<td>3 pin plug (for 60 or 62)</td>
</tr>
<tr>
<td>65.</td>
<td>5 pin plug (for 61 or 63)</td>
</tr>
<tr>
<td>66.</td>
<td>Two Speaker Plug (for 67)</td>
</tr>
<tr>
<td>67.</td>
<td>(for 66) Socket with circuit breaker</td>
</tr>
<tr>
<td>68.</td>
<td>Resistor pocket colour code machine</td>
</tr>
<tr>
<td>69.</td>
<td>Trimming tool for miniature OSC/IF Coils</td>
</tr>
<tr>
<td>70.</td>
<td>Fine mesh gold speaker fret 5¼ × 3 inches</td>
</tr>
<tr>
<td>71.</td>
<td>Terminal block, two-way Type 5C/430</td>
</tr>
<tr>
<td>72.</td>
<td>Condenser clips, 2 inch 9d., and 1½ inch</td>
</tr>
<tr>
<td>73.</td>
<td>Stand off ceramic insulator (HRP55)</td>
</tr>
<tr>
<td>74.</td>
<td>2¼ inch diameter drive drums</td>
</tr>
<tr>
<td>75.</td>
<td>Push-on points to fit ½ inch spindle</td>
</tr>
<tr>
<td>76.</td>
<td>Tag strips. 3-way 3d. 8-way</td>
</tr>
<tr>
<td></td>
<td>14-way 9d. 28-way</td>
</tr>
<tr>
<td>77.</td>
<td>Tag boards. 2½ × 1½ inches double 8-way</td>
</tr>
<tr>
<td></td>
<td>4½ × 1½ inches double 18-way</td>
</tr>
<tr>
<td></td>
<td>6½ × 2½ inches double 18-way</td>
</tr>
<tr>
<td>78.</td>
<td>Plain chassis board ¼ inch thick—</td>
</tr>
<tr>
<td></td>
<td>3 × 2 inches</td>
</tr>
<tr>
<td></td>
<td>4 × 3 inches</td>
</tr>
<tr>
<td></td>
<td>5½ × 3½ inches</td>
</tr>
<tr>
<td></td>
<td>12 × 12 inches</td>
</tr>
<tr>
<td>79.</td>
<td>Copper etched printed circuit panels—</td>
</tr>
<tr>
<td></td>
<td>6 × 3 inches 2—each or 3 for 5—PP</td>
</tr>
<tr>
<td></td>
<td>5½ × 6½ inches each at</td>
</tr>
<tr>
<td></td>
<td>Also 12 × 12 inches</td>
</tr>
<tr>
<td>80.</td>
<td>Fuse holder for 1½ inch cartridge fuse.</td>
</tr>
<tr>
<td></td>
<td>Single open type</td>
</tr>
<tr>
<td></td>
<td>Double open type</td>
</tr>
<tr>
<td>81.</td>
<td>Single hole fixing use holder</td>
</tr>
<tr>
<td>82.</td>
<td>Car radio fuse holder</td>
</tr>
<tr>
<td>83.</td>
<td>1½ inch cartridge fuses 250mA. 500mA. 250mA. 500Am. 1Am. 2Am. 3Am. 1Am.</td>
</tr>
<tr>
<td></td>
<td>2Am. 3Am. 5Am. 10Am. 6d. each.</td>
</tr>
<tr>
<td>84.</td>
<td>General purpose soft plastic high impact boxes:</td>
</tr>
<tr>
<td></td>
<td>a. 48 × 3 × 1½ inches high</td>
</tr>
<tr>
<td></td>
<td>b. 3 × 2 × ½ inches high</td>
</tr>
<tr>
<td></td>
<td>c. 2½ × 1½ × 1½ inches high (Blue)</td>
</tr>
<tr>
<td></td>
<td>d. 5½ × 3½ × 1½ inches high</td>
</tr>
<tr>
<td>85.</td>
<td>Rubber grommets, ½ × 1 inch, per dozen</td>
</tr>
<tr>
<td></td>
<td>Handy pack of assorted sizes</td>
</tr>
<tr>
<td>86.</td>
<td>Clip on Mes bulb holders</td>
</tr>
<tr>
<td>87.</td>
<td>Bulgin type with red or green glass</td>
</tr>
<tr>
<td>88.</td>
<td>Crocodile Clips Standard</td>
</tr>
<tr>
<td>89.</td>
<td>Crocodile Clips Miniature</td>
</tr>
<tr>
<td>90.</td>
<td>Insulated Croc. Clips</td>
</tr>
<tr>
<td>91.</td>
<td>Instrument type Croc. Clips</td>
</tr>
<tr>
<td>92.</td>
<td>½ inch shaft extension coupler 6d. Thin type</td>
</tr>
<tr>
<td>93.</td>
<td>½ inch × 2 inches spindle extension</td>
</tr>
<tr>
<td>94.</td>
<td>Moulded speaker baffle or plate. Cream Size 6½ × 3½&quot;</td>
</tr>
<tr>
<td>95.</td>
<td>Grey moulded cabinet front or speaker baffle for 7 × 4&quot; speaker size 12 × 5½</td>
</tr>
<tr>
<td>96.</td>
<td>Polythene 12-way terminal strip</td>
</tr>
<tr>
<td>97.</td>
<td>Slow motion reduction drive 6:1</td>
</tr>
<tr>
<td>98.</td>
<td>Clear plastic box 2½ × 1½ × ½</td>
</tr>
<tr>
<td>99.</td>
<td>General purpose test leads, pair</td>
</tr>
<tr>
<td>100.</td>
<td>Turret lugs (terminal pins) dozen</td>
</tr>
<tr>
<td>101.</td>
<td>Feed Through Insulators, dozen</td>
</tr>
<tr>
<td>102.</td>
<td>Bulgin 'Mes' enclosed bulb holders solder terminals—Panel fixing</td>
</tr>
<tr>
<td>103.</td>
<td>Bulgin chromed panel fixing type</td>
</tr>
<tr>
<td>104.</td>
<td>Pack of Nylon cable fixing clips</td>
</tr>
<tr>
<td>105.</td>
<td>PEA Lamp Holder</td>
</tr>
</tbody>
</table>
BOOKS AND MAGAZINES

(6d. Postage per Magazine or Book unless otherwise stated)

BERNARDS PUBLICATIONS

No. 148 PRACTICAL TRANSISTOR RECEIVERS
Size 10 x 7½ inches. 56 pages. 50 Simple Transistor Circuits and details 5/-

No. 149 PRACTICAL STEREO HANDBOOK Valve and transistor circuits 10 x 7½ inches. 10 x 7½ inches. 40 pages 3/6

No. 156 TRANSISTOR CIRCUITS MANUAL No. 1
Size 7½ x 5 inches. 32 pages 2/6
11 Circuits: Radios: Amplifiers: Generators:

No. 163 TRANSISTOR CIRCUITS MANUAL No. 2
Size 7½ x 5 inches. 44 pages 2/6
13 Circuits: Detector: Amplifiers: FM: Short wave: Transmitters: H/aid:

No. 168 TRANSISTOR CIRCUITS MANUAL No. 4
Size 7½ x 5 inches. 40 pages 2/6
11 Circuits: Preamplifier: Amplifier: Radios
Public address: Voltmeter: Injector: Transmitter: Power supply:

No. 170 TRANSISTOR CIRCUITS FOR RADIO CONTROL
* Size 10 x 7½ inches. 64 pages of Valve and Transistor Transmitters and Receivers 7/6

No. 171 SUPER SENSITIVE TRANSISTOR POCKET RADIO
32 pages. Construction of Miniature 5-Transistor Radio 3/6

No. 173 PRACTICAL TRANSISTOR AUDIO AMPLIFIERS
Book 1. 32 pages. Size 10 x 7½ inches. Theory and design of basic types 3/6

No. 174 TRANSISTOR SUB-MINIATURE RECEIVERS
* 48 pages of modern Transistor Radios of simple effective designs 5/-

No. 175 TRANSISTOR TEST EQUIPMENT
Covers equipment and servicing details. 32 pages. 10 x 7½ inches 3/6

No. 176 MANUAL OF TRANSISTOR AUDIO AMPLIFIERS
* 44 pages. Size 10 x 7½ inches. Practical Amplifiers from 50 microwatts to 75 watts. Covers 30 circuits. 6/-

No. 177 BEGINNERS BOOK OF TRANSISTOR CIRCUITS
* 56 pages. 10 x 7½ inches. Ideal for the beginner. Covers all designs. 7/6

No. 179 TRANSISTOR CIRCUITS MANUAL No. 5
* Continuation of No. 168 above. All types of circuit including Transistor Recorder. 5/-

No. 181 MICRO-ALLOY TRANSISTOR CIRCUITS
* 32 pages. 10 x 7½ inches. 22 circuits with details using Mat. Transistors all types of circuits 5/-

BOOKS LIST ARE MAINLY FOR TRANSISTORIZED CIRCUITS, MOST OF THE PARTS SPECIFIED ARE AVAILABLE FROM STOCK.

* Specially Recommended

No. 184 TRANSISTOR AM/FM PRE-BUILT UNITS. 10 x 7½ inches. 24 pages 2/6
No. 185 TRANSISTOR SHORT WAVE CIRCUITS
* 32 pages. 10 x 7½ inches 5/-
No. 186 TRANSISTOR SHORT WAVE AND
COMMUNICATIONS CIRCUITS
Continuation of Book 185. 6/-
No. 188 CONSTRUCTION OF 14 WATT VALVE AMPLIFIER 1/6
ABC of Transistors. 96 pages. 8½ x 5½. 60 circuits 5/-

* BRITISH SEMI-CONDUCTOR SURVEY CHARACTERISTICS OF AMERICAN AND BRITISH TRANSISTORS AND SEMI-CONDUCTOR DEVICES. SIZE 11 x 8 INCHES. 124 PAGES. 15/-

PUBLICATIONS

* Denco DBT4 Transistor/Valve Circuits 1/6
* Latest Edition of 'Radio Constructor' 2/-
* Latest 'Practical Wireless' 2/-
* Latest 'Radio Control Models' 2/-
* Wireless World Valve, Diode and Transistor Manual (156 Pages) 6/- pp. 1/-
* Transistor Circuits for Constructor No. 1 3/6
* Transistor No. 2 3/6
* Transistor No. 3 3/6
* Transistor No. 4 3/6
* British Transistor Directory (90 pages) 8/6
Gives Data on 470 Types
* Mullard Transistor Radios, Circuitry and Servicing 70 Pages 5/-
* Semi-Conductor Circuit Design 78 Pages 7/6
* Practical Transistor Circuits Number 2 3/6
* Repanco 15 watt DC/AC Convertor 9d.
* Repanco Transistor Amplifier Circuits 1/3

THE LARGEST RANGE OF QUALITY COMPONENTS FOR AMATEUR AND PROFESSIONAL APPLICATIONS LET US QUOTE FOR YOUR CIRCUIT.
4 WAVEBAND HIGH PERFORMANCE COMMUNICATIONS RECEIVER

MODEL RX60 OR SR40
(Both Models Identical in Every Respect)

★ HIGH SENSITIVITY ★ AVC-NOISE LIMITER-BFO
★ ELECTRICAL BANDSPREAD ★ BUILT IN 'S' METER
★ 5 INCH SPEAKER ★ TELESCOPIC AERIAL

SMARTLY STYLED DURABLE METAL CABINET

Now, you can tune in the world with this fabulous, BC-SW receiver. Keep up to date with the spot news coverage. Power packed superheterodyne circuit covers the broadcast band (550-1600Kc/s) and shortwave from 1600 Kc/s to 30 Mc/s in four bands. The perfect radio for shortwave listeners. Features a precision electrical bandspread with slide rule bandspread dial, 0-100 logging scale for easy self-calibration. Separate bandspread tuning condenser and calibrated "S" meter for accurate tuning. Meter can be electrically adjusted by rear panel control.

Sensitive circuit features, A.V.C. (Automatic Volume Control) to minimize blasting and/or fade out; Automatic noise limiter to reduce annoying interference. Includes convenient front panel B.F.O./selectivity control to allow for reception of C.W. (telegraphy). Also has convenient front panel headphone jack which automatically disconnects speaker. Jack can be used to drive an external speaker, Built-in 5" PM speaker provides big, clear sound on all stations. Useful tone switch is included to vary sound to suit conditions, or taste.

Three antennas (ferite loop for broadcast band, adjustable 36" whip for shortwave and wire antenna) provide high sensitivity and flexibility for best reception. Low impedance phones are recommended for use with this unit. Attractively styled steel cabinet with silver trim. Powered by 4 tubes plus a selenium rectifier. 1-12BA6, IF Amplifier, B.F.O., 1-12AV6 Audio Amplifier, A.V.C. detector; 1-50CS, Audio output.

PRICE

£25
Carriage etc. 7/6

FULLY GUARANTEED AND TESTED

4 WAVEBAND PROFESSIONAL COMMUNICATIONS RECEIVER

MODEL HE30 OR JR01

★ 4 Bands
550 Kc/s to 1600Kc/s
4.8 Mc/s to 14.5 Mc/s
1.6 Mc/s to 4.8 Mc/s
10.5 Mc/s to 30 Mc/s
★ 8 Valves plus Rectifier
★ IRF-21F Stages
★ Q-Multiplier
★ Electrical Band Spread
★ 0-100 Logging Scale
★ Built in 'S' Meter
★ AVC-MVC Selector
★ Aerial Trimmer
★ Automatic Noise Limiter
★ 10μV Sensitivity for 20dB S/N.

Outstanding Bandspread Selectivity and sensitivity with a built-in Q-multiplier combine to make the HE30 one of the finest general coverage bandspread Receivers available at this price. Covering 550 Kc/s-1600 Kc/s: 4.8 M/c; 14.5 M/c; 1.6 cm; 4.8 M/c; 10.5 M/c. For amateur bands an illuminated slide rule dial is provided, calibrated every 5 Kc/s on 80 and 40 metres taking 16 revolutions of the bandspread dial to cover each of these bands every 20 Kc/s, on 20 and 15 metres and every 15 Kc/s, on 10 metres plus an edgewise S-meter. For the SWL a 0-100 logging scale for instant readout plus coverage from 0.55-30 Mc/s.

The 8 valve plus Rectifier superhet circuit provides an RF stage with an Aerial Trimmer for peak performance plus 21F Stages for improved sensitivity of 1.0 microvolts for 10dB S/N ratio. The BFO variable pitch control can be used to separate CW stations whilst the Q-multiplier adds the selectivity needed for crowded phone band operation. Controls: Function Switch, Audio Gain, Selectivity (Q-multiplier), Frequency (BFO), Band Selector, IF gain, Trimmer, AVC-MVC switch, A.M. Switch, Main Tuning, Bandspread Tuning and Headphone Jack. Selectivity variable from -93dB to -30dB ±10 Kc/s (with Q-Multiplier), IF = 455 Kc/s, External P.M. Speaker required 4 or 8 ohms impedance. Output 1.5 watts. 3 modern Miniature B7G Base Valves and 5Y3 Rectifier.

Price £40 Carriage 15/-
TRANSISTOR TELEPHONE AMPLIFIER
MODEL 300 (OR TA790)

This Unit is ideally suitable for use in the office or where long telephone messages need to be taken, simply by switching the Unit on and adjust the volume, then fix the Limpet Microphone to the side of the Telephone base by moistening the suction pad. The Handset of the Telephone can be placed on the desk and the conversation carried on, leaving both hands free. It is completely independent of the mains, being battery operated and includes three Transistors. It is attractive in appearance and convenient in size being only $3'' \times 4\frac{1}{2}'' \times 1\frac{3}{4}''$, finished in two tone ivory/beige.

Price 59/6 p.p. 1/6
WITH BATTERY

INTERCOMM SYSTEMS

● ATTRACTIVE AND EFFICIENT ● FOR OFFICE, HOME OR WORKS

Type B. Deluxe two-way intercomm, suitable for home, office or works use. Two way calling and talking. Complete with battery and cable.

69/6 pp. 2/-

Type C. Sensitive 4-transistor printed circuit system with 2\(\frac{1}{2}\) in. speakers. Features two-way talking and press button two-way calling (buzzing). Housed in attractive moulded cabinets for desk or wall mounting. Save battery switch, i.e., unit is always off but buzzing system still operates. Supplied with batteries and cable.

£7.10.0 p.p. 2/-

Type D. A 7-station intercomm (master and 6-slaves) permits calling and talking from slave units to master and master to slave units. Main unit houses printed circuit amplifier with indicator lights, and buzzing system. 3\(\frac{1}{2}\) in. speaker and batteries. Housed in moulded cabinets with 3\(\frac{1}{2}\) in. speakers in the slave units. Ideal for office or works use.

£12.12.0 Master station 2 gns. each Slave

PORTABLE TRANSISTOR BABY ALARM

An extremely sensitive amplifier unit housed in attractive style cabinets. This cabinet contains the speaker amplifier, volume control and battery. The microphone is connected via a twin wire (any type can be used), to the amplifier unit and plugged in. The amplifier can be up to 200 yards from the microphone and still be effective. The microphone is placed within 15 feet of the baby, on a table, hooked on the cot or bed, etc.

The advantage of a transistor baby alarm! No mains supply, only a 9 volt battery which guarantees 100% safety, fully portable enabling the amplifier unit to be used in any room even out of doors.

Suitable connecting wire 4d. yard.

THOUSANDS NOW IN CONTINUOUS USE

★ INDISPENSABLE FOR BABIES,
YOUNG CHILDREN AND INVALIDS ★
TRANSISTOR TELEPHONE AMPLIFIER

Designed for use with all telephones to enable more than one person to listen in to the same telephone conversation. Also eliminates 'holding on' and wasting time waiting for a call to come through. Unit can then be switched on or left on as required.

- No modifications or direct connection to the telephone. A pick-up coil with a rubber sucker is supplied which just presses onto back or side of telephone (where best output).
- Unit incorporates 4-transistor printed circuit high output amplifier with speaker. As unit is battery operated amplifier is 'on' immediately on turning volume control.

READY TO USE £5.10.0. p.p. 2/- WITH BATTERY

Other uses include relaying telephone information, direct dictation, etc.

A boon for the busy office

EXTENSION BOOSTER UNIT

Portable Booster Speaker designed to plug into the earphone socket of any transistor radio or recorder to give five times the volume. The unit can be put on a table or desk or hooked onto the wall.

Supplied fitted with leads with two sizes of jack plug to fit all transistor radios. Overall size 9½ x 3½ in. diameter. 19/6 p.p. 1/-

You will be amazed at the quality and output available from your pocket radio.

- Also size 8 x 2½ in. diameter identical in appearance but with slightly reduced output compared with larger version. 19/6 p.p. 1/-

UN406 TRANSISTOR PORTABLE TAPE RECORDER

- Two track single speed recorder with remote control operation.

**SPECIFICATIONS**

- **Dimensions**: 205 x 165 x 66 mm
- **Weight**: 1.3 kg
- **Amplifier**: 4 transistors, 1 thermistor
- **Reel & Tape**: Standard 3" reel, 200 feet
- **Recording System**: D.C. Bias system
- **Recording Track**: Double Track
- **Recording Time**: Approximately 20 minutes for double track
- **Rewinding Time**: Approximately 80 seconds
- **Output Power**: 125 mW
- **Speed**: 2-3/4" per sec. (9.5 cm) Variable speed system
- **Speed Control**: Speed adjustable
- **Frequency Response**: 200-4000 c/s
- **Speaker**: 2½ inch dia. Dynamic Speaker
- **Motors**: 2 Micro Motor
- **Microphone**: Remote Control Microphone (Crystal)
- **Earphone**: Magnetic type plug-in system
- **Batteries**: UM1 x 2 for Motors (1.5 V)
- **VT3 or PP3 for Amplifier**
- **Battery Life**: About 12 hours
- **Drive System**: Rim Drive

**PRICE**: 10 gns

FULLY PORTABLE BATTERY OPERATED FULLY GUARANTEED

MODEL TP703 TWO SPEED TWO TRACK TRANSISTORISED PORTABLE TAPE RECORDER

**SUITABLE FOR SPEECH AND MUSIC - CAPSTAN DRIVE RECORDING SYSTEM**

The T.P.703 is suitable for all speech and most music recording situations. Operation is accomplished entirely by push buttons with rewind, stop-play, and record functions furnished by three simple dashboard styled push button controls. In addition, as a safety feature, a special record button is provided to prevent accidental erasure.

The correct recording level and battery condition is given by a front panel V.U. meter. Convenient volume control adjustment together with inputs for microphone extension speaker and radio. Two speeds 3½ and 1½ I.P.S. are provided with speed change easily accomplished by means of a simple adjustment.

Designed for maximum tape economy, the T.P.703 utilises precision, dual track heads, one erase plus one record/playback. Maximum record time 22 minutes at 3½ I.P.S. and 44 minutes at 1½ I.P.S. Exceptional sound fidelity are achieved by means of a specially developed recording bias system with a signal to noise ratio of -49 d.b. Equipped with remote control switch on microphone for exact recordings of your favourite music and important conversations, etc. House in an attractive two-tone high impact poly-vinyl case featuring a handy snap-open plexiglass top for fast efficient tape loading, complete with remote control microphone, 3" tape, earphone, batteries and instructions.

**SPECIFICATIONS**

- **Transistors**: Six transistors, 1 diode, 1 thermistor
- **Recording System**: Capstan Drive
- **Tape Speeds**: 3½ and 1½ I.P.S.
- **Battery Life**: 10 hours continuous use
- **Recording Track**: Dual Track
- **Rewind Time**: Less than 1½ minutes
- **Output**: 150 mW
- **Monitor**: V.U. meter with battery level indicator
- **Dimensions**: 9½ x 6½ x 3½"
- **Weight**: 4.4 lbs

**QUALITY RECORDER WITH REMOTE CONTROL SWITCH INCORPORATED INTO MICROPHONE**

Price 17 gns.
WALKIE TALKIE
MODEL STR908

9-TRANSISTOR
SELF CONTAINED
TRANSMITTER/RECEIVERS

★ Self contained Transmitter and Receiver designed for Short range communication
★ Superhet Circuit Crystal controlled on Transmit and Receive. Push-pull Audio output to speaker.
★ Range up to 5 miles depending upon conditions.
★ Fitted detachable Telescopic Aerials, Volume Control, Push to talk button Belt clip.

Supplied in pairs complete with Leather cases, Batteries and Instructions.

PRICE
£25 Per pair

8 WATT STEREO/MONO
HI - FI AMPLIFIER

MODEL SA80
£9.10.0

The SA-80 is a convincing example of the old adage "good things in small packages". So precisely designed that it has the look and feel of a fine camera. You can use it anywhere you would ordinarily place a book—on desk, table top, shelf or mantel, etc. The perfect choice for a low cost, high-fidelity music system.

Complete control facilities of the dual pre-amp. sections enable you to regulate stereo or monaural sounds with remarkable ease and precision. Selector switch gives you instant switching from 4 Watts per channel stereo operation to 8 Watts monaural operation. Wide range tone and volume controls provide thrilling stereo sounds in any room, even where one of your speakers cannot be placed for optimum stereo effect.

Complete facilities for connections to record players and tuners. All valves and components are mounted horizontally for compactness. Luxury styling too—the SA-80 features a deluxe, solid aluminium panel, beautifully colour styled in gold and brown with matching all gold cabinet.

★ SUPPLIED COMPLETE WITH INSTALLATION AND OPERATING MANUAL ★

 báo SA300 15+15 WATT PEAK £29.10.0 — LEAFLET ON REQUEST ◆

58
### Zephyr 7 Medium Wave Pocket Radio

7 Transistor Delux Radio

A truly remarkable radio, the "Zephyr" 730 is so compact and lightweight, you hardly know you are carrying it—turn it on and you get the biggest, clearest sound yet from a pocket set. Seven American "powertronic" transistors made by the world-famous Texas Instruments Inc. provide 300 milliwatts peak output power to bring you a new dimension in listening to small transistor radios.

Covers entire broadcast band...535-1605Kcs bringing in stations sharp and clear with greater sensitivity than any other pocket radio.

Unique output circuit—"Zephyr's" advanced technology makes use of distortion-free, transformerless circuity for the clearest and sharpest sound ever built into transistor radios.

Giant gold trimmed dial, easy to read for precision tuning. New "superphonic" high impedance speaker directly coupled to output transistors eliminates distortion due to output transformers necessary in ordinary transistor radios. Acoustically matched to cabinet for rich even tone quality. Super automatic volume control—the latest technology of using Tandon AGC circuit to compensate for variations in signal strength while tuning from station to station or when moving set from one place to another, assuring constant volume for your greatest listening pleasure.

Rugged high-style cabinet made of Dow Styron "high impact" plastic, available with gold trimmed white fronts, ebony, red, blue or white backs. 4" x 2½" x 1¼". (Colours in stock vary depending upon latest deliveries.)

Complete with all accessories—fine leather carrying case, long life battery and dynamic earphone make the 730 a completely personal radio.

### Zephyr - 7 Medium and Long Wave Pocket Radio

7 Transistor 2 Band Radio

A deluxe 2-band radio for people everywhere. Tune in your favourite stations regardless of area. Choose either 535-1605Kcs medium wave or 160-280Kcs long wave with greater sensitivity than ever thought possible from a pocket size radio.

Seven perfectly matched American "powertronic" transistors made by the world-famous Texas Instrument Inc. provide compactness, power and long distance reception to give you endless hours of 2-band listening pleasure any and everywhere you go.

Includes all the exclusive "Zephyr" features plus extra long ferrite rod aerial for reception of distant stations most portables cannot pick up. Band change switch located on back of cabinet to select either long or medium waves.

Rugged two-tone styron cabinet with deluxe anodized aluminium grille available in a variety of handsome colours. 4½" x 2½" x 4½".

Complete with all accessories—fine leather carrying case, long life battery, dynamic earphone and car aerial make the 712 the most versatile personal radio.

(New model 2-Band types. Medium and long wave, only 5gs. pp. 2/6)

### Galazy - 6 Medium Wave Pocket Radio

Perfectly made and presented this 6-transistor and diode pocket radio represents the finest value for money obtainable today. Just the right size with full tuning of the medium waveband, providing a host of continental stations—including radio Luxembourg, as well as B.B.C. programmes.

The price includes a leather case, personal earphone (automatically cutting out the speaker), battery, earphone case and cleaning cloth. All packed in a presentation case.

- Fully guaranteed and tested

Supplied ready to use in attractive presentation box complete with real leather case, earphone with case and battery 85/- pp. 1/6

### Other Radios in Stock

- 6-Transistor medium wave pocket radio. Complete with carry case, battery and earphone. Recommended Types
  - PRICE 69/6 pp. 1/6

- 6-Transistor medium and long wave pocket radio. Supplied complete with leather case. Batteries, earphone etc.
  - PRICE 55/50 pp. 1/6

- Three Wavebands. 7-Transistor medium, long and shortwave pocket portable. Complete with batteries, earphone and leather case.
  - PRICE 111.19/- pp. 2/6

- All Radios are Brand New and Fully Guaranteed ★
TUNING AND BATTERY INDICATOR
MODEL R101

This ultra-miniature tuning and battery indicator is easily mounted into portable radios, tape recorders or transmitters for indicating tuning centre and residual capacity of batteries. Galvanometer movement assures complete accuracy. Insulation resistance between case and terminals: 20 Megohms, 500V. Sensitivity: 400 µA. Solder terminals are provided at rear. Plastic case cover. Complete with example circuit for use. Size: 3 1/2 x 1/2 inch. Two fixing holes, 1 1/8 inch centres. 1½ inch overall front to back with ½ inch behind panel including terminals. 24/6 Post Free

AVO MODEL 8 Mk III
Brand new in makers cartons complete and fully guaranteed
£24 pp. 5/-

STEREO BALANCE METER—Model SB305

★ FOR CORRECT BALANCING OF STEREO.

★ METER SENSITIVITY 100 MICROAMPS. RESISTANCE 280 OHMS, CENTRE ZERO.

- Overall size 1 3/8 x 1 3/8 x 1 3/8 inches.
- METER CAN OF COURSE BE USED FOR MANY OTHER APPLICATIONS.

Price 25/- pp. 1/-

★ FOR REAL STEREO A BALANCE METER MUST BE USED ★

PLEASE NOTE PAGE 61: Type A 500 Microamp 27/6 0/1 mA, 0/5 mA, 0/300 volts now 25/-

EXTENDED RANGE OF TYPE A METERS
(SEE PAGE 61 OPPOSITE)

- Postage and Packing 1/6 per meter or 2/- for two.

15 Volts AC
50... Moving coil rectifier type. 1000 ohms per volt.
300...

Price 25/- each.

15 Volts DC
20... Resistance 1000 ohms per volt.
50...
300...

Price 25/- each.

50 Microamp. DC...
100... 32/6...
200... 29/6...
500... 27/6

1 Milliamp. DC
5...
10...
50...
100...
500...
0/5 Amp...

Price 25/- each.

- BRAND NEW FULLY GUARANTEED.

★ LARGE RANGE OF TEST EQUIPMENT IN STOCK FOR ALL PURPOSES ★
FULLY GUARANTEED

PANEL METERS

(POSTAGE AND PACKING, 1/6 ANY TYPE)

● TYPE A
Precision built clear plastic miniature DC moving coil panel meters.
Featuring jewelled bearings, silvered dials with black numerals and pointers.
Accuracy 2% of full scale.
Size 1¾ square front, 1¾ overall front to back including terminals. Requires
1¾ diameter hole in panel, four corner holes with ½ centres. Supplied
complete with mounting screws, etc.

● BLACK BAKELITE PANEL METERS
Precision built DC moving coil dual bearing meters. Accuracy 2½% of full
scale. Silvered dials with black numerals and pointers. Rugged and
reliable meters.

TYPE B. Size 1¾ square front, 1¾ overall front to back with ½ behind panel including terminals. Requires
1¾ diameter hole in panel, four corner holes with ½ centres.

TYPE BI Size 2½ square front, 2 overall front to back. Requires 2½ diameter
hole, 4 corner holes 1½ centres.

TYPE C Size 3½ diameter, 1¾ overall front to back including terminals. Requires 2½ diameter hole in panel.

TYPE D Size 2½ diameter, 2 overall front to back including terminals. Requires 1¾ hole in panel.

TYPE DI As type D, but overall diameter 2½

AC—Alternating current,
MI—Moving iron,
RF—Radio Frequency,
MC—Moving Coil,
TC—Thermo-couple,
DC—Direct Current

● 3 in. square as type 'A'. Available as 1mA D.C. only
Price 49/6 p.p. 1/6

EDGE WISE PANEL METERS
(MODEL EW16)

★ 200 MICROAMP 69/6
★ 1mA METER 59/6

INDIVIDUALLY BOXED AND FULLY GUARANTEED
SIZE 3¾ x 1 x 3½ IN.

● 2½ inch centre zero two range voltmeter. Reading 3-0-3 volts and 30-0-30 volts. Ideal for transistor
circuits.
12/6

ALL DC MOVING COIL TYPES

<table>
<thead>
<tr>
<th>TYPE 'A'</th>
<th>MICROAMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/50</td>
<td>32/6</td>
</tr>
<tr>
<td>0/500</td>
<td>25/5</td>
</tr>
<tr>
<td>0/1</td>
<td>22/6</td>
</tr>
<tr>
<td>0/5</td>
<td>22/6</td>
</tr>
<tr>
<td>0/300</td>
<td>22/6</td>
</tr>
<tr>
<td>1mA</td>
<td>29/6</td>
</tr>
<tr>
<td>1mA with built in light (6 volt)</td>
<td>35/5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE 'B'</th>
<th>MICROAMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/50</td>
<td>39/6</td>
</tr>
<tr>
<td>0/50</td>
<td>35/5</td>
</tr>
<tr>
<td>0/500</td>
<td>32/6</td>
</tr>
<tr>
<td>0/500</td>
<td>20/6</td>
</tr>
<tr>
<td>0/750</td>
<td>17/6</td>
</tr>
<tr>
<td>0/1</td>
<td>30/6</td>
</tr>
<tr>
<td>0/2½</td>
<td>12/6</td>
</tr>
<tr>
<td>0/5</td>
<td>26/6</td>
</tr>
<tr>
<td>0/5</td>
<td>20/6</td>
</tr>
<tr>
<td>0/5</td>
<td>8/6</td>
</tr>
<tr>
<td>0/300</td>
<td>27/6</td>
</tr>
<tr>
<td>0/3 or 3½</td>
<td>6/6</td>
</tr>
<tr>
<td>0/12</td>
<td>10/6</td>
</tr>
<tr>
<td>0/6</td>
<td>10/6</td>
</tr>
</tbody>
</table>

(x-scaled 0 to 3 K volts)

● "S" METER
Standard ham signal strength indicator. Calibrated from 0 to 9 and +10 to
+30dB. Also 0/5 and 0/10 linear scales. 1 mA meter sensitivity. 1½ in. square
× 1½ in. deep. 29/6

4 X 4 in. METERS (AS TYPE A)
New range of large size Clear Faced Panel Meters. Brand New and Boxed.
0/50 MicroAm 0/100 MicroAm 0/1 MilliAm

61
STROBE UNIT
Brand new in cartons. Ideal for experimentation or breakdown.
Contains 12 valves:
6-EF50: 5-EA50: SP61
Also Relays, Transformers, Controls, Chokes, Switches, Condensers, etc.

WELL BUILT UNIT—BRAND NEW 37/6 p.p. 2/-

RF WATT METER
Type TS A7/AP
New units built into black crackle finish case. General purpose wattmeter fitted with large sensitive selenium light cell. RF is fed to lamp, lamplight falls on cell which operates 220 microamp meter. Ranges 0/10/20/30 watts.
Complete with calibration charts in wood case.
£5-10-0 Brand new

VHF 2-METRE EQUIPMENT
- TRANSMITTER - RECEIVER-IFS - MODULATOR -
  ★ CRYSTAL CONTROLLED.
  ★ 9.72 Mc/s IF.
  ★ MOBILE OR FIXED STATION

TYPE 1985/86
COMPLETE UNITS COMPRISING RECEIVER, TRANSMITTER, IFS STRIP MODULATOR, CRYSTAL ETC. BUILT INTO ORIGINAL CASINGS IN GOOD CONDITION.
LESS VALVES AND DYNAMOTOR, 15/- EACH CARRIAGE 7/6 With Circuit.

★ VALVES AND TUBES
PAGES 23/24/25
★ QUARTZ CRYSTAL UNITS
PAGES 20/21/22
★ SILICON RECTIFIERS
PAGES 26/27.
★ TEST INSTRUMENTS
PAGES 64/65
★ TRANSISTORS
PAGES 28/29
★ PANEL METERS
PAGE 60/61
VIBRATORS
Post and packing 9d.
2 volt 7 pin synchronous 7/6
6 volt 5 non .. 12/6
6 volt 7 .. 12/6
6 volt 7 .. (centre pin) 12/6
12 volt 4 .. non synch. 5/-
12 volt 6 .. Plessey .. 7/6
12 volt 7 .. synchronous 12/6
12 volt 7 .. 12/6

VOLTAGE REGULATORS
Nominal input 230 volts AC 50/60 cycles. Output 0 to 260 volts. Fully shrouded.
2.5Amp Type £5.17.6 pp. 7/6
Weight 9 1/2 lbs.
iAmp Type £9.0.0 pp. 10/6
Weight 16 1/2 lbs.
10Amp Type £16.10.0 pp. 10/6
Weight 32 lbs.
Portable 2½ Amp Type with output metre weight 13 lbs.
Price £9.17.6 pp. 10/6
Brand new stocks fully guaranteed

AN/ARN-3D RECEIVERS
3-channel crystal controlled VHF receiver 332 to 335Mc/s contains 6 minia
ture relays 7-6AJS: 12S87: 2-12SN7: 28D7; 11 valves in all! IF'S, etc., in black crackle metal boxes.
only 59/6 p.p. 3/6
High stability transistor amplifiers. Comprising 10 OC201 Transistors. Rectifi
ers Tantemulum Capacitors etc. in die-cast cases.
★ 5/ each.
Morse Key
Miniature fully enclosed key with leads.
3/6 p.p. 1/-
LOW IMPEDANCE
MAGNETIC THROAT MICROPHONES
4/6 pp. 9d.
BRAND NEW

LARGE RANGE OF
SURPLUS UNITS ALWAYS IN STOCK.
PLEASE CALL IN

Blower Motor
12/24 volt blower.
Die-cast casing with nozzle.
12/6 p.p. 1/6
Dekatron Ericsson GS12C (CV1740) bi-di
rectional 12 way selector display tube.
22/6 Brand new

DEKATRON
Ericsson GS10CS (CV2325) Display tubes complete with base.
25/-
(brand new)

Motor
24 volt 2½ x 2 x 2 in.
motor ideal for models, etc.
8/6 p.p. 1/6

Flux Meter
HEAD
Type AP58150 Head
with Indicator
7/6 p.p. 1/6

831A (CV2466)
PHOTO MULTIPLIER
Brand new 60/- p.p.
1/-, Base 2/-
Special purpose version 931A- CY337
80/- p.p. 1/-

HENRY'S RADIO LTD., FOR EQUIPMENT FOR THE AMATEUR
HALOGEN QUENCHED
GEIGER LIQUID COUNTER TUBE
CV2886—TYPE M2H

Operating voltage .... 370 volts average
Plateau length ..... 100 " min.
... slope ..... 3% per 100 volts
Overall size ..... 95 x 25 mm.
Capacity ..... 5 ml.

Thin wall beta counters giving fixed source geometry with liquid samples high stability and long life makes the tubes ideal for standardisation. Stainless iron helical cathodes.

Fitted with rubber jacket.

22/6 p.p. 1/6

QUARTZ FIBRE POCKET DOSIMETER
SIZE 4½ x 0.6 inches

Limited quantity of these portable radiation measuring pocket instruments. Supplied in airtight containers. Two types a variable.

0—150r ...... 12/6 each p.p. 1/6
0—500r ...... 12/6 each p.p. 1/6

CRYSTAL SWITCHING UNIT

Fitted 6 two pin Crystal sockets, coils, ceramic switch etc.
7/6 p.p. 1/6

RF TUNER UNIT

RF 25 Switched tuning covering 30-40 Mc/s: Contains 3-VR65 valves, complete in metal case, size 8½ x 7 x 4 inches. Output 7.5 Mc/s IF.
10/- p.p. 2/6 with circuit.

EDWARDS HIGH VACUUM GAGE HEAD

Type M6
Brand new
15/- each. p.p. 1/6

GAMMA PROBE UNIT

Type 1292A with CV247 (G24H). GEIGER tube (400 volts) built into rubber covered ‘T’ shape container.
Brand new. 75/- p.p. 1/6

MINIATURE LEDEX ELECTRICALLY OPERATED SWITCHES

AS ILLUSTRATED WITH DOUBLE ACTUATOR ... 45/-
Also single actuator single set of contacts (few only) ... 25/- pp. 1/6
100-150 volt DC 6 banks of contacts (few only) 45/- pp. 1/6

MARCONI No. 19 SET CRYSTAL CALIBRATOR

Crystal controlled oscillators with spot frequencies at 10 kc/s, 100 kc/s and 1 Mc/s on/off modulator, etc., contains 3-125C7 valves and 2 built 3 in empty. Size 8½ x 4½ x 2 in. Supplied complete with full handbook. (Available separately 2/6)
79/6 p.p. 1/6

24 VOLT DC OPERATION FITTED TWO ACTUATORS FOR REVERSING PURPOSES FITTED AT LEAST 5 BANKS OF CONTACTS. SMALL SIZE EACH ACTUATOR IS ONLY 1¾ INCH DIAMETER.

A MINIATURE AND COMPACT FORM OF UNISELECTOR—BRAND NEW

PYE BRIDGE UNIT
Type 1

Built into varnished wood cabinet with black control panel. Fitted precision controls and switches. Galvo shunt, etc. Brand new in perfect condition, size 10½ x 6½ x 4½ in. Ideal for laboratory use.
27/6 p.p. 2/6

★ 4-Figure pulse counter, 0/9999
3/6 volt/Amp. Size 4 x 1 x 1 inch.
Brand new boxed. Price 10/- pp. 9/-

★ Cadmium plated 7 pin plugs and sockets with plug cover 5/6 pp. 6d.

★ 100 yard reels multistand wire PTFE covered 12/6 pp. 1/-

★ 6 Pole 2 way push on release off miniature switch size 1 x 1 inch. Price 6/- pp. 6d.

★ ORP12 Cd. cell 9/6 and ORP60 5/-

★ Bulgin bulb holder. M.E.S. type
Chromed with red glass ... 2/6

★ 12 volt 700 ohm relay 2 pole 2 way
7/6 pp. 9d.

★ Siemens high speed relay. Sealed type 1 pole 2 way. 1K+1K or 1.7K+1.7K 15/- each pp. 9d.

★ 12 volt 700 ohm relay 4 pole 2 way 15/- each pp. 9d.

See Page 29 for full range of Relays

If you are unable to find in this catalogue the component or equipment you require please contact us, our stocks are continually changing and therefore we may be able to help.
TEST METERS

ANYONE WHO USES A SOLDERING IRON KNOWS THAT WHEN HE WANTS TO BUILD, SERVICE OR DESIGN ANYTHING TO DO WITH RADIO OR ELECTRONICS — A MULTI-RANGE TEST METER IS A MUST

REMEMBER! YOU ARE ONLY GUESSING WITHOUT A TEST METER—GUESSING CAN BE VERY EXPENSIVE; AND TAKES THE FUN OUT OF ELECTRONICS.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DC VOLTS</th>
<th>DC CURRENT</th>
<th>AC VOLTS</th>
<th>RESISTANCE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT34</td>
<td>0/10/50/250/500/1,000 (1,000 ohms/volt)</td>
<td>0/1/100/500mA</td>
<td>0/10/50/250/500/1,000 (1,000 ohms/volt)</td>
<td>0/100 kohm (3kohm half scale)</td>
<td>3½ x 2½ x 1¼ in.</td>
</tr>
<tr>
<td>Complete with battery Test Leads and Instructions</td>
<td>£1.19.6 p.p. 1/6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THL33</td>
<td>0/10/50/250/500/1,000 (2,000 ohms/volt)</td>
<td>0/500 microamp, 0/10/250mA</td>
<td>0/10/50/250/500/1,000 (2,000 ohms/volt)</td>
<td>0/10k/100k/1 megohm (100 ohms: 1k, 100k half scale readings)</td>
<td>250pf to 0.1µfd</td>
</tr>
<tr>
<td>CAPACITY</td>
<td>-20 to +22dB and +20 to +36dB</td>
<td>SIZE</td>
<td>5 x 3½ x 1¼ in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete with battery, Test leads and full instructions</td>
<td>£3.15.0 p.p. 1/6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>0/10/20/60/300mA</td>
<td>0/100kohm (2kohm half scale reading)</td>
<td>4 x 3 x 1½ in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 ohms per volt</td>
<td>Complete with battery, test leads and full instructions</td>
<td>£2.9.6 p.p. 1/6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPI0K</td>
<td>0/5/25/100/500/1,000 (10,000 ohms/volt)</td>
<td>0/100 microamp, 0/250mA</td>
<td>0/5/25/100/500/1,000 (10,000 ohms/volt)</td>
<td>0/30K : 0/3 Meg. (150ohm and 15Kohm Half scale readings)</td>
<td>-20dB to +16dB</td>
</tr>
<tr>
<td>dB</td>
<td>DC voltage and current ±2% FSD. AC voltage ± 4% FSD. Resistance ± 3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>4½ x 3 x 1½ inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete with battery, Test Leads and full Instructions</td>
<td>£3.19.6 p.p. 1/6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the meters described feature easy to read scales and clearly marked range selectors — comprehensive instruction manuals and without doubt the best value and quality obtainable.

Suitable for the service engineer — home constructor — mobile tests — schools — design laboratories — electrical and electronics trades.

**BRAND NEW AND FULLY GUARANTEED**  
See page 66 for valve Voltmeters.
<table>
<thead>
<tr>
<th>Model</th>
<th>DC Volts</th>
<th>DC Current</th>
<th>AC Volts</th>
<th>Resistance</th>
<th>Capacity DB</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITI-2 (or 200H)</td>
<td>0/5/25/250/500/2,500 (20,000 ohms/volt)</td>
<td>0/50 microamp, 0/25/250mA</td>
<td>0/10/50/100/500/1,000 (10,000 ohms/volt)</td>
<td>0/6k/6 megohm ((300 ohms and 30 kilohm centre scale reading)</td>
<td>10pF to 0.001 mfd and 0.001mfd to 0.1 mfd</td>
<td>4/4 x 7/2 x 1/4 in.</td>
<td>£89/6 p/p 1/6</td>
</tr>
<tr>
<td>TP5S</td>
<td>0/10/50/250/500/1,000 (20,000 ohms/volt)</td>
<td>0/50 microamp, 0/5/50/500mA</td>
<td>0/10/50/250/500/1,000 (10,000 ohms/volt)</td>
<td>0/10k/10k and 0/1meg/10meg</td>
<td>50pF to 5000pF and 5000pF to 0.1mfd</td>
<td>5/2 x 3/2 x 1/2 in.</td>
<td>£5.19.6 p/p 1/6</td>
</tr>
<tr>
<td>500</td>
<td>0/5/1/2/1/25/10/25/100/500/1,000 (30,000 ohms/volt)</td>
<td>0/50 microamp, 0/5/50/500mA, 0/12 amps</td>
<td>0/25/10/25/100/250/500/1,000 (15,000 ohms/volt)</td>
<td>0/60k/6 meg/60 meg (350 ohms 35k and 350k midscale readings)</td>
<td>SHORT TEST: INTERNAL BUZZER FOR CONTINUITY TEST db: -20 to +56DB (0db = 1mY 600 ohms)</td>
<td>7-RANGE OUTPUT METER</td>
<td>£8.19.6 pp 2/-</td>
</tr>
<tr>
<td>EP30K</td>
<td>0/5/1/1/10/50/250/500/1,000 (30,000 ohms/volt)</td>
<td>0/50 microamp, 0/10/250mA</td>
<td>0/10/50/250/500 (12,000 ohms/volt)</td>
<td>0/10K/10Meg.</td>
<td>10db to +22dB</td>
<td>4/2 x 3/2 x 1/2 in.</td>
<td>£6.10.0 pp 2/-</td>
</tr>
<tr>
<td>EP50K</td>
<td>0/10/50/250/500/1,000 (50,000 ohms/volt)</td>
<td>0/25 microamp, 0/25/250mA</td>
<td>0/10/50/250/500/1,000 (10,000 ohms/volt)</td>
<td>0/10k/10k/1 meg/10 meg.</td>
<td>20dB to +20dB +20dB to +36dB</td>
<td>50,000 ohms per volt</td>
<td>£9.10.0 pp 2/-</td>
</tr>
</tbody>
</table>

Also MODEL EP100K
100,000 OHMS PER VOLT Version of EP50K (see page 90) £10.19.6 p/p 2/- (Leather case 29/6)
**VALVE VOLTMETER**

**RANGES.**

- **DC VOLTAGE** - POSITIVE AND NEGATIVE, 0/1/5/15/50/150/500/1500 Volts. (Lowest reading is 100 microvolts.)
  Accuracy ± 5% of full scale. Sensitivity 7.33 Megohm/Volt. 1½ v. Range.

- **AC VOLTAGE** - RMS, 0/1/5/15/50/150/500/1500 Volts. (Lowest reading 100 microvolts.)

- **AC VOLTAGE** - PEAK TO PEAK, 0/4.2/14.4/42/140/420/1400/4200 Volts. (Lowest reading 100mV.)

- **RESISTANCE** - From 0.2 ohm to 1000 Megohms in 7 ranges, 0/10/100/1k/10k/100k/1M/10M.
  Centre Scale Accuracy ± 3% of Scale.

**AC/DC VACUUM TUBE VOLT OHM METER**

**RMS AND PEAK TO PEAK AC SCALES**

- A high stability AC mains operated instrument. Features meter size 3½”x3½” in. of 195 microamps. DC input impedance 11 megohms. AC sensitivity 7.33 Meg/Volt. Frequency response (without optional RF probe) ±3% 50c/s to 2Mc/s or ±10% 25c/s to 4 Mc/s.

- Measures DC voltage positive and negative. AC RMS and AC peak to peak and resistance. Pointer can be adjusted for centre zero.

- Overall size 7½”x4½”x5 ins. Weight 4½ lbs.

FULLY GUARANTEED.
LEAFLET ON REQUEST.

**Price**

£13.19-6 pp. 2/6
Complete with manual and AC/DC Probe

* RF probe to extend frequency range to 100 Mc/s 40/- extra.

---

**VALVE VOLTMETER**

**MILLIVOLT OHM PLUS**

1 Kc/s TEST OSCILLATOR

- **DC Voltmeter.**
  Range : 100mV to 1,500V on 7 switched ranges.

- **Accuracy±3% of full scale.**
  Input resistance : 11 Megohms.

- **Resistances.**
  Range : 0.1 ohms to 1,000 Megohms, switched on 7 ranges.

- **Accuracy : ± 5%, at centre of scale.**
  dB Scale : 30dB to + 65 dB. O dB : 1mW in 600 ohms.

**AC Voltmeter.**

Range: 5mV to 1,500V on 10 switched ranges.

- Accuracy ± 5% of full scale.
  Frequency range : 20 cph to 4 Mc.
  Frequency response : 0-500mV (20cph, to 150 Kh.).
  1.5 to 150V (4 Mc).
  1.5V to 1,500V (20cph, to 4 Mc±1db).
  Input Impedance : 11 Megohms.
  Test Source : 1Kc±10%.

- **Test probe fitted with BUILT IN AC/DC switch, no fumbling or fiddling with Knobs.**
  Operates from Mains source. 240V, A.C. 50 c.p.s.
  Size : 5¾”x3”x6”.
  Weight : 5½ lbs.
  In attractive light grey crackle case, with satin alloy front.

**Price**

£35
WITH TEST PROBES.

---

**MINIATURE PLUG AND SOCKET**

7 Pin cadmium plated pins. Plug with cover size 3½”x3¼”⅛ inch inclusive of pins.
Socket 3¼”x⅞”⅛ inch two hole fixing.

**Price** 5/- pp. 6d.

---

**TRANSISTOR SIGNAL INJECTOR**

A pocket size signal injector for checking valve or transistor radios for faults. Consists of transistor, printed circuit oscillator with a long life built-in battery supply. Features a removable probe and lamp to light up circuit under test. Ready for use with instructions.

**Price** £35

**With Test Probes.**

---

**PROFESSIONAL QUALITY INSTRUMENT**
"TMK" TRANSISTORISED INSULATION TESTER
MODEL 521 WITH LEATHER CARRYING CASE

Designed for rapid testing and checking of electric circuits, appliances and components. A transistor DC-DC converter is employed to supply the high potentials, and is operated from 2-1.5 volt cells. There are three testing voltages, 100, 200 and 500 volts, to measure up to 500 meghoms.

The tester is housed in a strong steel case, making it suitable for use in the field, test rooms and service workshops. It is complete with test leads and leather carrying case.

SPECIFICATION:

<table>
<thead>
<tr>
<th>Ranges</th>
<th>Volts</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
<td>0-100 Megs</td>
</tr>
<tr>
<td>250</td>
<td></td>
<td>0-200 Megs</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td>0-500 Megs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>7 ins x 4½ ins x 4 ins.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>3 lbs 5 ozs.</td>
</tr>
</tbody>
</table>

£17.10.0 pp. 5/-

- FOR FIXED, MOBILE OR FIELD USE.

CAPACITANCE SUBSTITUTION BOX

- 9 RANGES FROM
  0.000 1mFD TO 0.22mFD

A must for the Serviceman or Design Engineer. Fast accurate selection of 9 standard value 600 volt working ceramic coated condensers. Built into metal box with calibrated dial. Fitted 36° red/black leads with croc. clips.

22/6 p.p. 1/-
Unit size 4 x 2½ x 1½ inches

RESISTANCE SUBSTITUTION BOX

- 24 RANGES FROM
  15 OHMS TO 10 MEGS

Ideal for design or service application. Provides 24 accurate standard resistors for circuit substitution. Easy to find correct bias values for all types of circuit.

Two switched ranges: 15 ohm to 10K rated 1 watt and 15K to 10 meg. rated ½ watt. Fitted 36° red/black leads with croc. clips.

32/6 p.p. 1/-
Unit size 4 x 2½ x 1½ inches

ALL WAVE FIELD STRENGTH METER
MODEL FL30H

- 5-SWITCHED BANDS 1MC/S TO 200MC/S.
- 200 MICROAMP METER INDICATION FOR RF; PHONE FOR AF.

A MINIATURE WAVE-METER FOR CHECKING TRANSMITTER OUTPUTS. DETERMINES RELATIVE STRENGTH OF FUNDAMENTAL FREQUENCY AND ANY HARMONIC OR PARASITIC RADIATION. COMPLETE AND SELF CONTAINED TELESCOPIC AERIAL AND EARPHONE INCLUDED. TO USE, SELECT REQUIRED FREQUENCY BAND, TUNE UNTIL METER INDICATES THE RF TRANSMISSIONS. LISTENING ON THE EARPHONE WILL ENABLE YOU TO HEAR THE MODULATION NOTE OR TO MONITOR AUDIO.

BANDS: 1. 1MC/S TO 31MC/S, 2. 31MC/S TO 9MC/S, 3. 9MC/S TO 25MC/S, 4. 25MC/S TO 90MC/S, 5. 90MC/S TO 200MC/S.

A MUST FOR ANY TRANSMITTER — IDEAL FOR RADIO CONTROL

62/6 POST FREE

67
WIDE RANGE TRANSISTORIZED
Nombrex Model 2

RANGES
(1) 1 ohm to 10k ohms.
(2) 100 ohms to 1 megohm.
(3) 10k ohms to 100 megohms.
(4) 1 pf to 0.01 mfd.
(5) 100 pf to 1 mfd.
(6) 0.01 mfd to 100 mfd.

Provides quick and reliable measurement of capacitance up to 100 MFD and resistance up to 100 Meg—ohms. Features clearly marked dial, indicator tube, power factor and leakage check facilities. Printed circuit construction. Fully portable battery operated instrument. Ideal for amateur, professional and college use. Features 3-TANSITOR, 2-DIODE CIRCUIT.

£8.50 pp. 2/6
COMPLETE WITH BATTERY AND INSTRUCTIONS.

WIDE-RANGE ALL TRANSISTOR
Nombrex Model 27

Covers radio broadcasts and I.F. band. All amateur, V.H.F., shipping and television channels up to 350 Mc/s.

- 149 Kc/s to 350 Mc/s in 8 ranges.
- Output: RF and IF, AF, modulated RF.
- Full RF attenuation.
- 1 Kc/s 1 volt RMS AF output.

Offers performance comparable with most standard size instruments selling in the higher price ranges. The wide frequency range, robust construction and easy portability make it the ideal all-purpose instrument for radio and television service engineers, technical colleges and institutes. Amateur enthusiasts and technical laboratories. Printed circuit design built into a robust metal case with easy to read front panel, fully portable and battery operated.

£9.10.0 pp. 2/6
INCLUDING BATTERY TEST LEAD & INSTRUCTIONS

Signal Generator

Supplied complete with instructions and circuit.

FULLY DESCRIPTIVE LEAFLET ON REQUEST

TRANSMITTER POWER SUPPLY UNIT
Nombrex Model 61.

A TRANSISTORIZED REGULATED MAINS OPERATED POWER SUPPLY UNIT PROVIDING SMOOTH DC OUTPUT FROM 3 VOLT TO 15 VOLTS. ANY VOLTAGE UP TO 15 AT ANY CURRENT FROM 2MA. TO 100MA. DESIGNED FOR RUNNING OR TESTING TRANSISTOR RECEIVERS, AMPLIFIERS AND OTHER EQUIPMENT ELIMINATING THE INCONVENIENCE AND EXPENSE OF USING DRY BATTERIES. SUPPLIED WITH INSTRUCTIONS — MAINS CABLE — PLUGS — FULLY FUSED.

£6.10.0 pp. 2/6
FULLY GUARANTEED AND TESTED

WITH FULL INSTRUCTIONS:

DETAILED LEAFLET ON REQUEST

See page 66 for NEW ADDITIONS to TEST EQUIPMENT

68
WIDE RANGE AUDIO GENERATOR

Nombrex Model 63

Ranges
1. 10 to 100 c/s
2. 100 to 1 Kc/s
3. 1 Kc/s to 10 Kc/s
4. 10 Kc/s to 100 Kc/s

Features 5-Transistors; Controlled when bridge oscillator with thermal automatic control of output voltage sine wave. Separate triggered circuit for square wave output. Maximum output 1 volt peak from 1 Kohm. Three position attenuator and continuously variable control. 1dB voltage constant stability over entire range.

£16.15.0 pp. 2/6
Complete with battery, test lead & instructions.

PORTABLE Valve Voltmeter
Made by Electronic Designs
Type 195-A

- DC ELECTRONIC VOLTMETER
  0/3/10/30/100/300/1,000 Volts. Input resistance constant on all ranges. 11 Megaohm. Sensitivity 3.666,666 Ohms Per Volt on 3 Volt Range.

- AC VOLTMETER (DIRECT READING)
  0/10/30/100/300/1,000 Volts. Sensitivity 1,000 Ohms Per Volt.

- ELECTRONIC OHM-METER
  0/1K/10K/100K/1 meg/10 meg/1,000 meg Ohms. 6-ranges.

- 110/250 VOLTS AC MAINS INPUT.

Size 9½ x 6 x 6in.

THE IDEAL INSTRUMENT FOR PROFESSIONAL, AMATEUR OR RESEARCH.

WIDE RANGE ALL TRANSISTOR
MODEL 66

Allows measurement of inductance from 1μH to 100H, 'Q' and tan S measurements. Features two directly calibrated scales and moving coil edge wise panel meter. Clearly marked scales and control switches.

All transistor printed circuit design comprising source oscillator and amplifier coupled to bridge circuits. Full selective negative feed back.

Price £18 pp. 2/6 Complete
with battery and instructions.

PORTABLE Valve Voltmeter
Made by Electronic Designs
Type 195-A

- METER MOVEMENT 200 microamp DC Accuracy ±2%.

- ALL SCALES ARE SUB-DIVIDED SO THAT VERY SMALL ACCURATE DIFFERENCES CAN BE READ. SCALE SIZE IS 4 in. CLEARLY MARKED WITH INDIVIDUAL AC AND DC SCALE MARKINGS. A KNIFE EDGE POINTER IS USED. CLEARLY MARKED RANGE SELECTOR SWITCHES, ZERO AND OHMS ADJUST CONTROLS ARE PROVIDED.

Price £9.19.6
p.p. 5/-
Fully guaranteed
Complete with Instruction Book, circuit, test and leads.

THE IDEAL INSTRUMENT FOR PROFESSIONAL, AMATEUR OR RESEARCH.
"Lafayette"

AMERICAN
RECORDING TAPE

<table>
<thead>
<tr>
<th>TAPE</th>
<th>ACETATE BASE</th>
<th>MYLAR BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 inch Standard</td>
<td>600ft</td>
<td>8/6</td>
</tr>
<tr>
<td>5 inch Long play</td>
<td>900ft</td>
<td>10/–</td>
</tr>
<tr>
<td>5¼ inch</td>
<td>1200ft</td>
<td>12/6</td>
</tr>
<tr>
<td>7 inch</td>
<td>1800ft</td>
<td>15/–</td>
</tr>
<tr>
<td>(Postage and Packing 1/– per reel)</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

"BEL-CLEER"

CANADA'S HI-FI RECORDING TAPE

<table>
<thead>
<tr>
<th>TAPE</th>
<th>5 inch 600ft, standard play</th>
<th>5 inch 900ft, LP</th>
<th>5¼ inch 1200ft, LP</th>
<th>7 inch 1200ft, standard play</th>
<th>7 inch 1800ft, LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>12/6</td>
<td>15/–</td>
<td>18/6</td>
<td>18/6</td>
<td>25/–</td>
</tr>
<tr>
<td>(Postage and packing 1/– per reel)</td>
<td>Fitted leaders: First quality acetate base attractive boxed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"Scotch Boy" 3 inch 150ft 5/3
Spare Reels 3 inch 1/6
5½ inch 2/6
7 inch 2/6
GARRARD ★ Magazine with one 4 spool (Empty) 12/–
★ Garrard 4" empty spool 3/6

MODEL T635 TAPE SPlicer
For editing and repairing tape. Complete with three blades.
14/– pp. 1/–

SPECIALS
★ Scotch Boy 3½ in. 300 ft. LP type with spare spool Price 5/6 pp. 1/–
★ Marriot ¼ track R/RP. head with Mullard PM erase. Price 15/– pp. 1/–

SEE PAGE 84 FOR DETAILS

MINIATURE ¼ TRACK TAPE HEAD

RECORD PLAYBACK TAPE HEAD IDEAL FOR ECHO EFFECTS ON EXISTING RECORDERS OR AS A TWO TRACK TAPE HEAD FOR A RECORD/PLAYBACK AMPLIFIER.

IMPEDANCE IS 19k ohm AT 1 kc/s: D.C. RESISTANCE 260 ohms. BIAS CURRENT 300 MICRO-AMP, D.C. SIGNAL RECORD CURRENT 60 MICRO-AMPS.

RESPONSE—53db: INDUCTANCE APPROX. 0.5H.

OVERALL SIZE—½ x ½ x ½ inch.

15/– p.p.9d.

BARGAIN OFFER

SCOTCH BOY TAPE
3½ INCH L.P. TAPE BRAND NEW AND SUPPLIED WITH SPARE SPOOL.
PRICE 5/6 PP. 1/–
3½ INCH SPARE SPOOLS 1/– EACH.

TAPE HEAD DEMAGNETIZER
Model TD 79

When a recording machine leaves its factory the heads are unmagnetized. However, music and speech consist of a series of transients often not symmetrical in peak value. Other symmetrical transients may occur in line noise in starting and stopping the machine. The effect is cumulative and after a short time the recording head will have picked up enough magnetism to raise the noise level by several dB and to increase second harmonic distortion. "Eagle's" TD.79 is a compact easy to handle, truly professional quality tape head demagnetizer to completely remove magnetism from tape heads, permitting improved tape recordings and through frequent use reduces harmonic distortion and noise level. 230/250V AC complete with instructions.

32/6 Post Free
GARRARD TWO SPEED TWO TRACK TAPE DECK

New 9 volt 2 speed battery tape deck. Provides 3½ and 1½ inches/sec. tape speeds, two track recording. Fitted ½ track medium impedance record play head and erase head. Oscillator coil. Facilities provided are fast wind—forward and reverse—7 to 9 volt motor with centrifugal electrical governor—70 minutes record/playback at 3½ in/sec. or 140 minutes at 1½ in/sec.—Pause button etc. takes spools up to 4 inches up to 650 feet.

LEAFLET WITH FULL DETAILS ON REQUEST.

SUPPLIED WITH TEMPLATE AND LEAFLET GIVING FULL SPECIFICATIONS, DETAILS OF BIAS CURRENTS ETC. ETC.

COMPLETE WITH TAPE MAGAZINE

NEW LOW PRICE

COLLARO STUDIO TWO AND FOUR TRACK TAPE DECKS

LATEST QUALITY TAPE DECK FITTED COLLARO RECORD/PLAYBACK AND ERASE HEADS WITH SPACE FOR ADDITIONAL HEAD. FEATURES THREE FULLY SCREENED 4-POLE INDUCTION MOTORS, FULL FUNCTION CONTROLS FOR WIND/REWIND, RECORD/PLAYBACK, PAUSE ETC. FITTED DIGITAL COUNTER. STANDARD 220/250 VOLT MAINS OPERATED.

THREE SPEEDS: 1½", 3½" AND 7½" PER SECOND.

OVERALL SIZE : 12½ x 10½ INCHES : DEPTH 4" BELOW PLATE.

PLAYING TIME : 120, 60 OR 30 MINUTES PER TRACK WITH STANDARD 1200 FT. REEL. MAXIMUM TAPE SIZE 7 INCHES WITH 1800 FT.

PRICES

- Two Track £10.10.0 pp. 5/-
- Four Track £13.19.6 pp. 5,-

BRAND NEW
FULLY GUARANTEED

SUPPLIED COMPLETE WITH HAND BOOK GIVING ALL NECESSARY INFORMATION. TAPE HEAD IMPEDANCES — VOLTAGES — RESPONSE CONNECTIONS ETC.

CABINET FOR COLLARO STUDIO DECK, WITH SPEAKER, 5 GNS. pp. 3/6 — SEE PAGE 13

ALSO RECORDING AND PLAYBACK AMPLIFIERS SEE PAGES 2/12/13/14

BSR TD2 TWO TRACK TAPE DECK

Speed 3½" per second. Half Track: Upper track, left to right. Reel size: Up to 52".

(52" reel of standard tape 850 feet, 52" reel of long play tape 1200 feet). Playing time:

1½ hours with 52" reel of standard tape, 2 hours 8 minutes with 52" reel of long play tape.


PRICE £7.10.0 pp. 5/-

See Pages 2/12/13/14 For Recording and Playback amplifiers.
GARRARD AUTOSLIM ★ MONO OR STEREO ★
The Autoslim has been designed to occupy as small a space as possible. 6\(\frac{3}{4}\) inches in depth, 6\(\frac{1}{2}\) lbs. in weight. One piece pick-up arm or plug in head arm which is wired for stereo.
Cabinet space required: 14\(\frac{1}{2}\) long, 12\(\frac{1}{2}\) wide, 4\(\frac{1}{2}\) above and 2\(\frac{1}{2}\) below top of motorboard, mono units. Fitted with GC8 cartridge or similar, four speeds: 78, 45, 33 and 16 r.p.m. Automatic selection or manual operation. For all record sizes. Supplied complete with crystal or ceramic cartridge.

- **FIXED HEAD MODEL** (mono) £6.10.0 pp. 3\(\frac{1}{2}\)
- **PLUG IN HEAD MODEL** (mono) £6.19.6 pp. 3\(\frac{1}{2}\)
- **PLUG IN HEAD MONO/STEREO** £7.10.0 pp. 3\(\frac{1}{2}\)
- **PLUG IN HEAD DERAM MONO/STEREO** £10.10.0 pp. 3\(\frac{1}{2}\)
- **PLUG IN HEAD 6 to 9 volt Battery version** (mono) £8.19.6 pp. 3\(\frac{1}{2}\)

GARRARD AT6 AUTOSLIM ★ MONO OR STEREO ★
Model AT6 has a heavy turntable with an aluminium tubular pickup arm dynamically balanced and counter-weighted as standard fitting. It is a professional arm in every respect with plug-in pickup head and has the unique Garrard Stylus Pressure Adjustment with no variation from first to last record. A high performance unit which is ideal for manual playing yet embodies automatic selection of all types of records when required.

- **Mono Version GC8 Head** £10.10.0 pp. 3\(\frac{1}{2}\)
- **Mono/Stereo ACOS 73/2 Cartridge** £10.19.6 pp. 3\(\frac{1}{2}\)
- **Mono/Stereo •Sonorone or EV26 or Ronnette** £11.19.6 pp. 3\(\frac{1}{2}\)
- **Mono/Stereo •Deca Deram** £13.19.6 pp. 3\(\frac{1}{2}\)

(* DEPENDS UPON CURRENT STOCKS)

GARRARD SRP10.
Model SRP10 is a new Single Record Four Speed Player, designed to meet the modern trend for compactness and styling, whilst still maintaining the standard of quality and reliability. It possesses all the features usually associated with larger units and is economically priced.

- **Complete with GC8 Cartridge** £5.5.0 p.p. 3\(\frac{1}{2}\)
- **Also 6\(\frac{1}{2}\)/9 volt Battery version** £6.5.0 p.p. 5\(\frac{1}{2}\)

BSR MONARCH UA15 AND UA14

Automatically plays 10—12 in., 10 in. or 7 in. records of same speed intermixed in any order. 4 speed, 78, 45, 33 and 16 r.p.m. Simple to operate with manual play facility. Adaptable to take any of the standard stereo cartridges. Transcription quality. Automatic cut off. Dimensions: Height from top of motor board to top of fully raised control arm 5\(\frac{3}{4}\) in. Depth below top face of motor board 1\(\frac{1}{4}\) in. Length 13\(\frac{1}{2}\) in. Width 11\(\frac{1}{2}\) in.

- **UA15 IS NEW SLIMLINE VERSION ★**
  - **UA14** £5.19.6 p.p. 3\(\frac{1}{2}\)
  - **UA15** £6.19.6 p.p. 3\(\frac{1}{2}\)

**COMPLETE WITH T95 MONO CARTRIDGE ★**

BSR GU7 FOUR SPEED RECORD PLAYER
A 4-speed Gramophone unit of compact design, the GU7 has clean, modern styling and upholds the B.S.R. standard of reliability and first-class engineering. Plays 10", 12" or 7" records. Four speeds: 78, 45, 33 and 16 r.p.m. Rubber turntable mat for record protection and positive drive. Simple to operate with On/Off switch. Automatic cut-off. Jockey Pulley automatically disengaged when not in use. (9 volt) Battery or 220/250 volt mains operation. Built-in monaural cartridge. 45 r.p.m. adaptor and clip supplied with each unit.

Overall sizes: 11 x 8\(\frac{1}{2}\) in. 3 in. under deck. 1\(\frac{1}{2}\) in. above deck.

**TWO MODELS ★**

- **9 VOLT BATTERY**
  - Complete with Cartridge.
  - 5 gns pp. 3\(\frac{1}{2}\)
  - (either type)

**ALL UNITS FEATURED ARE BRAND NEW AND FULLY GUARANTEED ★**
TRANSCRIPTION UNITS - BATTERY DECKS - RECORD CLEANER-CARTRIDGES

★ STARR SINGLE SPEED DECK
A light weight single speed battery operated record deck for portable record players. Plays 45 rpm records. Fitted crystal pickup. Overall sizes: Deck size 9 x 7 1/2 inch, 2 1/4 inch above deck, 2 1/4 inch below. Fitted low current 9 volt governed motor.
Supplied complete with pickup arm and cartridge Price 39/6 pp. 2/-

★ STARR TWO SPEED DECK
A compact lightweight efficient 2-speed record player for 7", 10" or 12" records. Fitted 9 volt low current governed motor. Plays 45 rpm. and 33 rpm. Fitted locking lightweight crystal pick-up arm automatic cut out switch coupled to pick-up arm.
Overall sizes 9 1/2 x 5 1/2 inches reducing to 3 1/2 inches. 1 1/2" below deck, 1 1/2" above deck.
★ PRICE 79/6 pp. 1/6

TRANSCRIPTION MOTORS POST ETC.
7/6
ANY TYPE.
★ Garrard 4HF Mono (less plug in pickup) ... £15 16 6
★ Philips AG1016 Mono /Stereo ... £12 12 0
★ Garrard A Mono /Stereo (less plug in pickup) ... £18 19 9
★ Garrard 301 Transcription ... £22 0 0
★ Garrard 401 Strobe ... £32 10 0
★ Garrard LAB 80 Transcription Auto ... £27 0 0
★ Sugi Connoisseur II ... £16 6 6
★ Goldring Lenco GL70 ... £26 3 0
★ Goldring Lenco 88 ... £17 14 0
★ Goldring Lenco GL58 ... £15 19 0
★ Garrard 3000 LM Sonotone Stereo ... £12 12 0
★ Garrard Decadeck Deram Stereo ... £15 15 0
(Above units to order only 1-2 days)

We will be pleased to quote for other transcription units.

STYLUS MICROSCOPE
MODEL SSI

The stylus scope has been specially and most carefully designed to solve all stylus problems with a magnification lens of x230, the scope is battery operated, the needle is placed on the inspection plate, the tip is then magnified, and projected on the screen at any desired angle by use of back and forth, up and down controls.
Complete with on/off switch, bulb and instruction book, fully guaranteed — 52/6

STYLUS MICROSCOPE - TRANSCRIPTION ARMS AND MOTORS

Well known Garrard BAI turntable fitted with crystal pick-up plays 45 r.p.m. records. Works from 6 to 7 1/2 volt battery with 100Ω speed control (supplied): Mechanical speed governor, ideal for use with transistor or mains amplifiers. Fitted cut out switch 60 mA average current on 6 volt battery. Overall sizes: 8 1/2 x 7 in. 1 1/2 in. Above base, 2 in. below.
Price 39/6 pp. 2/-

★ ACOS 73 /2 Cartridge diamond stylus (Stereo) ... 35/-
★ Above with Garrard plug in moulding ... 42/6
★ Decca Deram stereo cartridge ... £3 13 6
★ Plug in head with deram (Suitable for autoslim and AT6) ... £4 0 0
★ GC6 Mono Cartridge ... 19/6
★ Above fitted to Garrard plug in moulding ... 25/6
★ Eagle PP190 Arm with Mono stereo cartridge ... £3 5 0
★ Decca Deram transcription Arm ... £4 14 6
★ Eagle A-18 transcription Arm ... £8 10 0
★ Eagle A15 Transcription Arm ... £4 17 6
★ Model PG40 Stylus Gauge ... 9 6

RCI2. AUTOMATIC RECORD CLEANER

Now you can protect your valuable records from dirt and dust—the professional way. “Eagle's” R.C. 12 record cleaner is easily fitted to any pick-up arm, either autochanger or transcription types and there is absolutely no change on needle pressure. The brush contains many hairs different in thickness, length and set towards different directions. Thus removing dirt and dust over the entire record and these are absorbed on a rotating roller. Complete with adjustable mounting bracket to fit all arms. Complete with instructions.
Price 15/6 pp. 9d.
EAGLE HIGH FIDELITY LOUDSPEAKERS — QUALITY AND PERFECTION

CX300 12 INCH TWO WAY SPEAKER

Both diaphragms are specially treated for ultra-linear distortion-free response and are driven by a long aluminium coil suspended in a total flux of 200,000 Maxwells. Clean crisp response to the lowest frequencies, excellent damping and built-in electrical crossover network are inherent in this speaker system to produce the truer high fidelity without feeling any change of the sound source on the overall frequency range. Finished in blue opalescent enamel, complete with chrome-plated screw terminals and carrying handles.

Price £12.19.6

Frequency Response — 30-16,000 cps.
Resonant Frequency — 35 cps.
Capacity — 15 watt, Peak: 25 watt
Sensitivity — 105 db
Impedance — 15/16 ohm

Crossover Frequency — 2,500 cps.
Total Flux Tweeter 18,000 maxwell
— Woofer 200,000 maxwell
Flux Density Tweeter 10,500 gauß
— Woofer 12,000 gauß

CRI12AE 12 INCH TWO WAY SPEAKER

A remarkable speaker system for true high fidelity and superb stereo at low cost. The CR-12AE embodies two reproducing cones mounted co-axially with power coming from the same voice coil. The woofer cone reproduces the lower frequencies and the tweeter cone gives efficient high frequency reproduction. Due to the double cone construction velvet smooth crossover is possible. A series of Accordion diffusers on the cone eliminates that interference inherent in all symmetrical speakers, bringing you the finest in concert hall music reproduction.

Price £7.19.6

Frequency Response — 30-16,000 cps.
Resonant Frequency — 45 cps.
Capacity — 10 watt
Peak 20 watt
102 db
15/16 ohm
Diameter 121" Voice Coil Diameter: 2" Depth: 3/4" Baffle Opening: 11" diameter Crossover Frequency: 18,000 cps.
Total Flux: 85,000 maxwell

CR30AE 12 INCH THREE WAY SPEAKER

A 12" Speaker designed and engineered to satisfy the most discriminating listener. The CR.30AE achieves full 3 speaker performance through its advanced triaxial design. The woofer, midrange radiator and tweeter are all axially mounted within a single speaker system. The quality of the CR.30AE is immediately evident in its uncompromising performance. Bass response is tight and solid without boom or hangover to achieve phenomenal realism. At 1,800 cps, frequencies are channelled into a stiff-kneed mid frequency radiator by means of a smooth mechanical crossover. High frequencies are reproduced with tranquillity by means of a compression driver tweeter. A built-in crossover allows the tweeter to take over at 5000 cps. Rigid low silhouette die cast framework ensures perfect alignment and minimum space.

Price £9.19.6

Frequency Response — 30-16,000 cps.
Resonant Frequency — 45 cps.
Capacity — 10 watt, Peak 20 watt
102 dB
15/16 ohm
Diameter 12 1/2": Depth 3 1/4": Baffle opening 11" diam.

8A7 8 INCH TWO WAY SPEAKER

The remarkable quality and performance of this 8" hi-fi speaker provide it with the largest 8" of sound you have ever heard. With almost uncanny ability the 8A7 achieves a standard of natural balance, distortionless performance and superb transient responses normally associated with larger and costlier speakers.

The dual-cone construction ensures wide range response. The 2" cone tweeter has a ball shaped mounting for maximum dispersion of high frequencies with no back radiation. Its small size makes it perfect for use in a wide variety of small enclosures for hi-fi and stereo systems.

Price 75/- pp. 2/-

* CORNER CABINET 20 INCHES HIGH BY 9 INCHES ACROSS, REXINE COVERED CHIP BOARD CABINET WITH GOOD BAFFLE QUALITIES — IDEAL ECONOMY UNIT FOR 8A7 SPEAKER.

Price 35/- pp. 2/6
GOODMANS HIGH FIDELITY LOUDSPEAKERS

AXIETTE 8 (8 inch—6 watt—15 ohm)
The latest model of the smallest true High Fidelity Loudspeaker produced features a new high efficiency permanent magnet system using FERODA II anisotropic ceramic magnet material, allowing considerable reduction in magnet assembly depth. The unique hyperbolic diaphragm—plastic terminated aluminium drive coil and magnet system are housed in a new precision diecast chassis of strong and slender design. Enclosure volume requirement only 3,000 cubic inches. This is an ideal speaker for stereophonic and monophonic installations.

Price £5.5.6 pp. 3—

Specification
Frequency range.................. 40–15,000 c/s
For amplifiers up to.............. 6 watts (12 watts U.S.A.)
Fundamental resonance............. 65 c/s
Flux density..................... 13,500 gauss
Total flux......................... 53,000 maxwells
Voice coil....................... 1 1/2 (2.54 cm) diameter—aluminium
Impedance....................... 15/16 ohms
Chassis......................... Diecast
Overall diameter................. 9 5/8 (24.9 cm)
Overall depth................... 5 3/8 (13.7 cm)
Reflex enclosure volume (Internal)........... 3,000 cu. ins.
Baffle hole diameter............. 7/8 (5.7 cm)
Fixing holes................. 4 holes 3/4 (1.9 cm) diameter equally spaced on 7 1/2 (19.4 cm) P.C.D.
Nett weight..................... 4 lbs (1.81 kg)

AXIOM 10 (10 inch—10 watt—15 ohm)
This very popular High Fidelity Loudspeaker bridges the gap between small installations (using the Axiom 8) and those involving large enclosures. It features a new magnet system in FERODA II anisotropic ceramic magnet material, plastic terminated hyperbolic diaphragm and aluminium voice coil all housed in a precision diecast chassis. With a power handling capacity of 10 watts, and an enclosure volume requirement of only 5,000 cubic inches, the Axiom 10 is a highly satisfactory, yet economical, choice for all medium sized domestic High Fidelity installations.

Price £6.6.0 pp. 3/6

Specification
Frequency range.............. 40–15,000 c/s
For amplifiers up to........... 10 watts (20 watts U.S.A.)
Fundamental resonance........ 45 c/s
Flux density..................... 13,500 gauss
Total flux......................... 53,000 maxwells
Voice coil....................... 1 1/2 (2.54 cm) diameter—aluminium
Impedance....................... 15/16 ohms
Chassis......................... Diecast
Overall diameter.............. 10 5/8 (26.9 cm)
Overall depth................... 4 5/8 (10.9 cm)
Reflex enclosure volume (Internal)........... 5,000 cu. ins.
Baffle hole diameter............. 8 1/2 (21.6 cm)
Fixing holes................. 4 holes 3/4 (1.9 cm) diameter equally spaced on 9 1/2 (24.4 cm) P.C.D.
Nett weight..................... 4 lbs 12 ozs (2.16 kg)

AUDIOM 51 BASS (12 inch—15 watt—15 ohm)
The AUDIOM 51 BASS is a rugged 12" single diaphragm unit handling up to 15 watts of power. It is specially designed for High Fidelity enthusiasts who need a 12" Loudspeaker as the Bass unit in their three-way systems. The AUDIOM 51 BASS has a fundamental resonance of 35 c/s, and is fitted with a powerful FERODA II magnet system giving high efficiency and control. A rigid diecast chassis holds all parts in permanent alignment; connection is by means of binding posts.

Price £9.2.6 pp. 4/6

AXIOM 201 (12 inch—15 watt—15 ohm)
The AXIOM 201 is an entirely new addition to the GOODMAN'S High Fidelity range, and is specially designed for High Fidelity enthusiasts who prefer a 12" Loudspeaker but do not need the high power handling capacity and the extra high efficiency of the AXIOM 301. This remarkable twin diaphragm 12" unit has smooth performance from 30 to 16,000 c/s and can be used with amplifiers up to 15 watts. It has a plastic treated suspension, aluminium voice coil, powerful FERODA II magnet assembly, and is mounted in an elegant diecast chassis of great strength and slender silhouette.

Equally suitable for stereophonic or monophonic installations.

Price £10.7.0. pp. 4/6

Specification
Frequency range.............. 30–16,000 c/s
For amplifiers up to........... 15 watts (30 watts U.S.A.)
Fundamental resonance........ 15 c/s
Flux density..................... 13,500 gauss
Total flux......................... 87,500 maxwells
Voice coil....................... 1 1/2 (4.4 cm) diameter—aluminium
Impedance....................... 15/16 ohms
Chassis......................... Diecast
Overall diameter.............. 12 1/8 (32.1 cm)
Overall depth................... 5 1/8 (13.2 cm)
ARU 172 enclosure volume (Internal)........... 7,800 cu. ins.
Baffle hole diameter............. 11/16 (30.6 cm)
Fixing holes................. 4 holes 0.312 (0.8 cm) diameter equally spaced on 11 5/16 (29.8 cm) P.C.D.
Nett weight..................... 9 lbs 12 ozs (4.43 kg)

Specification of AUDIOM 51
Maximum power handling capacity 15 watts (30 watts U.S.A.)
Fundamental resonance........ 35 c/s
Total flux......................... 87,500 maxwells
Voice coil....................... 1 1/2 (4.4 cm) diameter—aluminium
Impedance....................... 15/16 ohms
Chassis......................... Diecast
Overall diameter.............. 12 1/8 (32.1 cm)
Overall depth................... 5 1/8 (13.2 cm)
ARU 172 enclosure volume (Internal)........... 7,800 cu. ins.
Baffle hole diameter............. 11/16 (30.6 cm)
Fixing holes................. 4 holes 0.312 (0.8 cm) diameter equally spaced on 11 5/16 (29.8 cm) P.C.D.
Nett weight..................... 9 lbs 12 ozs (4.43 kg)
TWEETERS - CROSSOVERS - MATCHING TRANSFORMERS - LOUDSPEAKER CONTROL

See Page 90 for 20 Watt

'EAGLE' HI-FI HORN TWEETER

MODEL CT10

The CT.10 horn tweeter represents the latest manufacturing techniques employed for true high-fidelity reproduction in the upper, middle and top frequency ranges in multi-unit speaker installations. The operating system is of the pressure unit type and utilizes a spun aluminium diaphragm driven by an aluminium wire wound voice coil operating in a magnetic gap of high-flux density. The driving unit and magnet are mounted in a spun alloy pot which carries the short exponential horn of circular section into the throat of which the drive diaphragm feeds. Due to the constructional stiffness of the horn no undesirable resonances are excited in use and this in conjunction with the wide and smooth angular dispersion of the high frequencies provide brilliant, clean and crisp sound. Finished in matt black the unit is flange and drilled for baffle mounting. The speaker lead connections are made by two solder tags polarized for correct phasing.

**PRICE 27/6** pp. 1/6

An example of "Eagle Products" advanced engineering and design. The HT.20 rectangular horn tweeter is ideal for 2-way and 3-way speaker systems for the smooth and clean high-quality reproduction of the critical upper, middle and top frequencies. The operating system used is a pressure unit utilizing a plastic domed voice coil wound with aluminium wire operating in a magnetic gap of high-flux density produced by a generously proportioned magnetic assembly. A heavy cast alloy exponential rectangular horn with special sonophase throat design is mounted on the magnet face and this besides subduing unwanted resonances also provides 180° dispersion of high-frequencies so necessary for the natural reproduction of speech and music. The HT.20 in addition features high sensitivity and with its extra heavy drive unit it may confidently be used in systems of the highest power. Finished in stove enamelled gold with an adjustable chrome base to permit mounting either inside or on top of enclosure. The speaker leads connections are made by two terminals polarized for correct phasing. Complete with instructions.

**PRICE 69/6** pp. 2/6

Also HT40 89/6 pp. 2/6 See Page 90

SPECIFICATIONS

Max. Output: 10 Watts
Frequency Response: 1500-18,000 c.p.s.
Optimum Crossover: 3,000 c.p.s.
Sensitivity: 104db/w
Impedance: 15/16 ohm
Mounting Hole: 3/8" V

RECTANGULAR HORN TWEETER

MODEL HT20

WB CONE TWEETER UNIT

MODEL T359

Provides a very high standard of reproduction when used in conjunction with 'Stentorian' 10" or 12" units. Incorporates high sensitivity 9,000 gauss magnet, special cone and lightweight coil. Frequency response: 3,000-15,000 c.p.s. Overall size: 3½ square x 2" deep. Voice coil impedance: 15 ohms or 3½ ohms. (State which). Power handling capacity: 15 watts when used with a 3,000 c.p.s. crossover.

**Price 30/6** pp. 1/6

**WB CROSS OVER NETWORKS**

CX3000 Half section series connection 12dB peroctave attenuation
CX1500
CX500 Quarter

**STAR WHERDFIELD MATCHING TRANSFORMERS AND CONTROL**

**WMT2** As WMT1 but fully isolated

**Price 30/- pp. 1/6**

**SMI**

Stereo mixing and isolating transformer. Provides stereo combinations for either two treble and one full range speakers or two full range and one treble or one treble and one full range speaker. Complete with instructions. 15 watts maximum.

**Price 30/- pp. 1/6**

**DIVIDER NETWORK COILS**

Denco divider network coils, complete with connection diagrams.

For 3½ ohm speakers 15/-
For 12½ ohm speakers 17/6 pp. 1/6 either type.

**SEE PAGE 90 FOR SUPER CROSSOVER WITH CONTROLS.**

COMPLETE RANGE OF WB STENTORIANS AND GOODMAN LOUDSPEAKERS, CABINET ASSEMBLIES AND ACCESSORIES AVAILABLE.

LEAFLETS WITH PRICES OF FULL RANGE ON REQUEST.

**LOUDSPEAKER VOLUME CONTROLS 'TRUQUAL'**

Constant impedance type control which does not cause distortion. For use up to 15 watts. Supplied complete with instructions.

Type 32 for 2½ ohm speakers 15/-
Type 98 For 6½ ohm speakers 15/-
WB STENTORIAN — HIGH FIDELITY SPEAKERS

★ MODEL H.F.1012

10" Die-Cast Unit, incorporating 12,000 gauss magnet. Fitted with cambric cone and universal impedance speech coil providing instantaneous matching at 3, 7.5 and 15 ohms. Handling capacity 10 watts. Frequency response 30 c.p.s. to 14,000 c.p.s. Bass resonance 35 c.p.s.

PRICE 87/6 pp. 3/-

★ MODEL H.F.1016


PRICE £7 pp. 3/-

★ MODEL H.F.812

8" Die-cast Unit, handling capacity 5 watts. Frequency response 50 c/s to 12,000 c/s. Bass resonance 65 c/s. Fitted 12,000 gauss magnet. Universal speech coil for 3, 7½ or 15 ohms.

PRICE 72/6 pp. 3/-

★ HF1012 : HF1016 : HF812:
ALL TYPES IN STOCK.

SPECIAL OFFER
EM1 13½ x 8½ x 4½ in. high 10 watt 15 ohm with Tweeter. 50 c/s to 20 kc/s. Resonance.
Price £6.19.6 pp. 3/-

★ HF1016 MAJOR
16,000 gauss, 10 watts, 30 c/s to 16 kc/s, 10 inch, 15/16 ohms.
£8.19.6 pp. 3/-

★ HF1214
14,000 gauss, 15 watts, 25 c/s to 14 kc/s, 12 inch, 15/16 ohms.
£10.5.6 pp. 3/-

★ HF1216
16,000 gauss, 15 watts, 20 c/s to 16 kc/s, 12 inch, 15/16 ohms.
£15.15.0 pp. 3/-

★ HF912
12,000 gauss, 7 watts, 40 c/s to 13 kc/s, 9 inch, universal 3.75 and 15 ohms.
77/- pp. 3/-

★ HF916
16,000 gauss, 7 watts, 40 c/s to 14 kc/s, 9 inch, 3.75 and 15 ohms.
£6.4.3. pp. 3/-

★ HF816
16,000 gauss, 6 watts, 40 c/s to 14 kc/s, 8 inch, 3.75 and 15 ohms.
£6 pp. 3/-

★ HF1016 MAJOR : HF 1214 : HF 1216 : HF 912 : HF 916 : HF 816 TO ORDER 2 DAYS

All WHARFDALE Speakers available on 48 hour delivery

ECONOMY SPEAKER CABINETS

WITH AND WITHOUT SPEAKERS.

ALL TYPES ARE WOOD BAFFLE CABINETS ATTRACTIVELY COVERED WITH TWO-TONE REXINE UNLESS STATED. ATTRACTIVE MATCHING MATERIAL GRILLS — FULLY GUARANTEED.

CABINETS : — SEE PAGES 53, 64 AND 65 FOR SUITABLE SPEAKERS.

1. Polish Wood Non-Burn Speaker baffle type Cabinet for 7 x 4 inch elliptical Speaker.
   12/6 pp. 1/6

2. Rexine covered to house 6½ x 5½; two 5 inch or any others up to 9 x 6 inches.
   22/6 pp. 1/6

5. Cabinet for 5 inch speaker
   12/6 pp. 1/6

6. 10/12 inch Cabinet
   49/6 pp. 5/-
   Size 17 x 15 x 7½ ins.

7. Portable Amplifier/Speaker Cabinet.
   39/6 pp. 2/6
   Size 14½ x 7½ x 8 ins.

CABINETS WITH SPEAKERS

1. Rexine covered fitted 7 x 4 inch 3 ohm speaker, corner cabinet type for vertical use.
   29/6 pp. 2/-

2. Rexine covered extension speaker, fitted 5 inch 3 ohm speaker.
   22/6 pp. 2/-

3. Rexine covered cabinet fitted 8 inch 3 ohm speaker, Ideal for extension or main speaker unit.
   39/6 pp. 2/6

4. Extension speaker cabinet with 6½ inch 3 ohm speaker.
   29/6 pp. 2/-

5. Column units fitted 2 off 7½ x 4 inch and 4 inch tweeter for 3 ohms.
   69/6 pp. 3/-

77
TELEPHONE RECORDING ADAPTOR

Designed for use with amplifiers or tape recorders for listening to or recording telephone conversations. Impedance about 2k ohm with sufficient output for valve or transistor equipment. Miniature size, fitted with rubber sucker which presses on to telephone in position giving maximum volume.

9/6 pp. 1/-

ACOS 40 DESK OR HAND MICROPHONE

A robust, sensitive, crystal microphone giving good results with a wide range of amplifiers and recorders. 

Crystal Contact Microphone

A sensitive high impedance contact microphone particularly suitable for musical instruments. Clips onto soundboard of guitar. Ideal for any amplifier.

12/6 pp. 1/-

MICROPHONE STANDS

For Microphones on Pages 79 and 80

FS3 (OR MS4) MICROPHONE FLOOR STAND

Professional telescopic floor stand featuring "velvet action" for fast, quiet adjustment without slipping or wear. Functionally designed base assures maximum stability. Full chrome plated tube assembly adjustable from 20" to 54" Terminates in a 3/8-27 thread to fit models 100C, BM3, DM11, DM16HL, DM17HL, DM304, SM100, UDI9HL, and MC70 microphones etc.

PRICE 57/6 pp. 2/6

DS2 (OR MS2) MICROPHONE TABLE TOP STAND

Telescopic two section stand. Heavy chrome finish with black base. Minimum height 9 inches, maximum 15 inches. For all microphones as listed for FS3 above.

Price 29/6 pp. 1/6

DS1 MICROPHONE TABLE TOP STAND

Moulded economy type for any of the Microphones listed in above floor stand list.

Price 10/6 pp. 1/6

Table Stand as fitted to 100C

10/6

(See page 80 for illustrations)

POST AND PACKING 1/6 EXTRA

MODEL CN35

GUITAR MICROPHONE

59/6 pp. 1/6

Fitted Lead, Volume and Tone Controls.
PROFESSIONAL QUALITY MICROPHONES

DMII (OR DM301) DYNAMIC MICROPHONE WITH BASE

Here is a flexible newly-designed dynamic microphone integrated with a matching desk stand. This professional quality microphone is ideal for tape recording, public address, broadcasting and communication use. Ruggedly constructed with tapering body and removable base for desk or hand use, 360° swivel ball joint allows tilting in any direction making it simple to aim the microphone at the source of sound. Magnificently finished in mist blue enamel with chrome trimming. Complete with shielded cable, stand, individually cartoned and guaranteed.

PRICE 5 GNS  pp. 2/6

Specification:
Sensitivity:  — 54 db
Response:  60—12,000 cps
Impedance:  50K ohms
Pick-up:  Omni-directional
Case:  Die-cast zinc
Finish:  Blue enamel and satin chrome
Size:  9" high, 2" diameter at head, tapering to 3/4" top
Stand:  5"

25 foot screened microphone extension cable with sockets, plug etc. for all microphones 29/6

DM 16HL (OR DM301) DUAL IMPEDANCE DYNAMIC MICROPHONE

The highest quality, most strikingly designed microphone in our range. Designed by leading audio engineer to offer you the most outstanding performance for those applications where highest quality is essential, yet cost is an important factor. The DM-16HL will stop or greatly reduce feed-back howl and, because of its acoustically correct grill head, eliminates unwanted pick-up from sides and rear to allow greater working distance from microphone. Built-in switch for high or low impedance, allowing longer mike lines without frequency loss. Self-adjusting swivel action permits tilting through 90° backward. Complete with shielded cable, individually cartoned and guaranteed.

PRICE 89/6 pp. 2/6
(DM301 is 50Kohm single impedance)

Specification:
Sensitivity:  — 62 db
Response:  40—15,000 cps
Impedance:  50 ohms low, 50K ohms high
Pick-up:  Single direction
Case:  Die-cast zinc
Finish:  Satin chrome
Size:  61/4" high, 11/4" wide, 2" deep

Floor Stand  57/6 pp. 2/6
Table Stand  29/6 pp. 1/6

(See Page 78 for full details)

DM 17HL (OR DM304) DUAL IMPEDANCE DYNAMIC MICROPHONE

For the first time ever a cardioid variable "D" (variable distance) microphone at a price everyone can afford. The highly desirable cardioid pattern provides a significant front-to-back signal ratio to suppress noise, reverberations and feedback. Pop-proof wire mesh grill and space construction allow close talking without booming bass, air blasts or distortion. Front pick-up range is near twice that of pressure microphones. Impedance easily changed from high to low by moving one wire. Complete with On-Off switch, swivel action and shielded cable. Individually cartoned and guaranteed.

PRICE 82/6 pp. 2/6
(DM304 is 50Kohm single impedance)

(See Page 78 for stands)

STEREO DYNAMIC MICROPHONE
Model SMD100

Response 50 c/s to 15 kc/s. Sensitivity —60dB. Impedance 50 Kohms.
Mono/stereo switch-parallel output on mono.

Size with base 83/8 in high microphone 21/2 in. diameter base 43/8 in. diameter.
Total weight 6 lbs.
(Floor stand 57/6 pp. 2/6)

PRICE WITH STAND AND CABLE  £6-19-6 pp. 2/-

DM12 (OR DM3) 50Kohm high sensitivity stick type.  Price 5 Gns. pp. 2/6

MINIATURE DYNAMIC STICK
MODEL DM14S (ORDM26) OR DF1
MICROPHONE AND STAND

High sensitivity—Output Impedance, 50 Kohm
Frequency response, 100–12,000 c/s. The
magnets and other parts are made from care-
fully selected materials and precision finished.
Built-in preamplifier minimises induction and
interference. Cast aluminium casing with Two-tone fawn enamel finish with
chrome desk stand with rubber lined bracket.
Length of body, 3½”x1½” dia.
(Model DF1 has claw foot base instead of
illustrated solid type).
Complete with Stand and Cable
Price 52/6 pp. 1/6
SENSITIVITY—58db±3db, non directional.

IDEAL FOR PROFESSIONAL OR AMATEUR USE—
HAND HELD OR DESK TOP

MODEL DF3 DYNAMIC STICK
MICROPHONE WITH STAND

High Impedance Dynamic Microphone suitable for
most types of good quality Tape Recorders,
complete with Desk Stand with adjustable
elbow. Die-cast body and stand finished in
two-tone grey enamel and chrome. Measurements:
Length of body, 3½”x1½” dia., height
on stand (as shown), 7”.
Impedance 50Kohm, sensitivity—50db.

Supplied complete
with cable and DETACHABLE STAND.
Price 79/6

MODEL 100C (CM30) CRYSTAL MICROPHONE

May be hand held, stand mounted or suspended
by Lavallier cord. The 100C is a truly slim
microphone for desk top, floor stand,
hand held or chest use. Smooth rounded
design attractively finished. Here is a flexible
quality microphone with characteristics for
almost all public address, recording, communi-
cation, general and professional applications.
Has built-in locking On-Off switch complete
with detachable shielded cable, felt lined,
Lavallier, cord and bracket, chrome finish
holder and stand, swivel cradle to allow tilting
for multi-angle use. Individually cartoned and
guaranteed.

Specification
Sensitivity : —52 db.
Response : 60–10,000 cps.
Directional Characteristics : Non-directional.
Finish : Aluminium diecast casing in satin chrome.
Size : 5” long, 1½” diam.

PRICE 32/6 pp. 1/6
(Including Table stand)

Quality Crystal and
Dynamic Microphones

MODEL BM3 (or 200C)
CRYSTAL STICK
MICROPHONE

OUTSTANDING VALUE
A superb High Impedance Microphone of
professional appearance. Size 7 in.
×1 in. (average dia.). Black finish
with chrome fittings. Response 60 c/s to 15,000 c/s; — 62 db sensitivity.
Can be hand held, stand mounted
for desk or table, or suspended by
neck cord. Stand, neck cord and 6 ft.
cable fitted with jack plug all included
in the price. Fitted muting switch.
Complete as illustrated with
stand in Presentation Box.
Price with stand 49/6 pp. 1/6
Low Priced High Fidelity

DM61D DYNAMIC
STICK MICROPHONE
WITH STAND

Similar in appearance and specification
to model DM14S above.
But casing made from non-metallic
moulded materials.
Supplied complete with cable and detachable plastic stand.

Price 32/6 pp. 1/6

MC70 STUDIO CRYSTAL MICROPHONE

This professional omni-directional microphone provides features
found only in microphones selling for many times the price.
360° pick-up—using a new variable “D”, shock-mounted crystal
 cartridge for added power and sensitivity. Two separately tuned
 chambers in microphone housing maintain smooth response and
 provide natural reproduction. Complete with shielded cable,
stand holder, swivel mounting, individually cartoned and
 guaranteed.

Specification
Sensitivity : —50 db.
Response : 50–12,000 cps
Pick-up : Omni-directional
Finish : Black plastic case with chrome punched basket
Size : 7” high, 3” wide

PRICE 42/6 pp. 1/6

UD19H PROFESSIONAL
MICROPHONE DUAL
IMPEDEANCE

Undirectional type size 10” x 1½”.
Dual impedance 600 ohm and 50 Kohm.
Response to 14 Kc/s. Sensitivity —75db.
For 600 ohm or —55db at 50 Kohm.

• See page 79 for more professional
type microphones.
**STEREO-STETHOSCOPE HEADPHONES**
Freq. response 40-16000 cps., Impedance 2 x 8 ohms. Equipped with two individual earphones for true stereo reproduction. Extremely sensitive, the sound is carried through plastic tubes tipped with removable earpieces, ingenious hinge device permits adjustment to any desired spacing.

Weight less than 2 ozs. May also be used for monaural listening. 25/- p.p. 1/-

---

**MONOURAL STETHOSCOPE HEADSETS**
Suitable for radio, recorders, monitoring etc. Two versions available.

- Low impedance, 100 ohm, 12/6
- High impedance, crystal 10/6

Supplied with leads (Post etc 1/6 extra)

---

**DYNAMIC MICROPHONE INSERT**
MODEL MM2
Size 1½ inch round and ½ inch deep. Response extends up to 20 Kc/s.

Impedance 2000 ohms.

Price 15/- pp. 6d.

Also 2Kohms ½ x 3 ½ inch.

Price 10/- pp. 6d.

---

**ACOS CRYSTAL MICROPHONE INSERTS**
2 in. diameter 45-2

½ in. square 9/6 p.p. 6d.

ACOS 39-1 STICK CRYSTAL INSERT

15/- pp. 6d.

---

**STEREO HEAD PHONES MODEL RF7D**
Light weights Semi-professional stereo headphones. 8-16 ohms impedance. Fitted moulded ear pads and adjustable headband. Ideal for stereo or mono reproduction. Excellent quality.

Price 12/6 pp. 1/6

---

**PERSONAL EARPHONES**
Type A
1000 ohm Impedance with Earclip, Leads and Jack Plug and Jack Socket. 7/6

250 ohms as above 6/6

Type B
8/10 ohm Impedance, with leads, and jack plug and socket. 5/6

600 ohm imped. with jack plug and Sockets 5/6

Type C
Crystal (high impedance) earphone With jack plug and Socket 5/6

Note:
All sockets fitted with cut-out switch.

---

**PROFESSIONAL STEREO HEADPHONES (MODEL SE1)**
For absolute stereo perfection. Fitted 3 inch dynamic loudspeakers in each side. Foam rubber ear pads—Fully isolated left and right Channels. Response 25 C/s to 14 Kc/s, 8-16 ohms Impedance, 500mW Maximum input.

£5.19 6 pp. 2/-

WITH CONTROL BOX.

- FULLY GUARANTEED

(Control Box)

- Supplied complete with control box, for matching and switching, instructions and lead in cartons.

- 25ft EXTENSION SCREENED CABLE 10/6 EXTRA

---

**HEADPHONES — EARPHONES — MICROPHONE INSERTS**

---
### BRAND 5

- **HI-FI RECORDING TAPE**

**BRAND NEW FULLY GUARANTEED**

Supplied in modern design boxes.

**Note.** This range now replace the Lafayette range on page 70.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Retail Price</th>
<th>Post &amp; Packing</th>
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<td>7&quot; STD</td>
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### TSL SUNDOWN

**AUTOMATIC PARKING LIGHT**

Operates from car battery to switch parking lights on and off. Transistorised circuit with photo cell device. Supplied complete with lamp, which clips to window top, and 'brain' which attaches by means of a rubber sucker to window.

Fully Guaranteed.

**PRICE 45/- pp. 1/6**

**GOES ON WHEN IT'S DARK AND OFF WHEN IT'S LIGHT**

### SPECIAL MICROPHONE OFFER

**ACOS 45 HAND MICROPHONE**

A first class crystal microphone originally sold at 2Gns. Special shape fits easily into either hand. Robust die-cast case.

Response 30c/s to 6 kc/s. Supplied with cable and foldaway clip/stand.

Fully guaranteed.

**PRICE 19/6**

### EAGLE MODEL PG40

**STYLUS GAUGE**

**PRICE 9/6 pp. 1/-**
CONSTANT VOLTAGE TRANSFORMER
(Automatic Voltage Stabilizer.)

Essential equipment in Laboratories for ensuring correct readings of Test Gear etc.

Provides Fluctuation-free Mains Supply.
Output: 240v. A.C. ± 1.5% 250 VA.
★ NO MAINTENANCE
★ NO MOVING PARTS
★ NO ATTENTION

Saturate Core design which provides immediate response—Continuous—Self protecting if appliance is short circuited.

Entirely suitable for use as a step-up Transformer Compact: 10"x5"x7" high. Weight: 17 lbs.
Fitted with switch and signal lamp, in attractive Silver Hammer Finish steel case with carrying handle.

PRICE £11 10. 0.
Carriage 8/6
complete with Lead & Plug.

PORTABLE VARIABLE AC POWER SUPPLY UNIT

Designed for Technicians whose requirements call for a visual indication of applied voltage.
Output: 0-260v. 1.5 amps.
Steel louvred case finished in hammer bronze houses “SLIDUP” variable transformer, voltmeter, fuse, safety indicator & switch.

PRICE £7 15. 0.
carriage 7/6
Complete with Lead & Plug.

VARIABLE TRANSFORMERS

Variable control of Voltage, Power, Speed, Light and Heat.

Output: 0-260v.
★ Shrouded fully variable transformers suitable for bench or panel mounting.
★ Rated current consistent at all points along the winding.

MODEL SBS. 5 AMP.

Prices and Models available (Carriage extra)

| 2.5 Amp | £5 | 17. 6. | 3/6 |
| 5 Amp   | £9 | 0. 0.  | 5/6 |
| 10 Amp  | £18| 5. 0.  | 5/6 |
| 20 Amp  | £32| 10. 0. | 10/6|

TRANSISTORISED MEGOHMETER

Battery operated. 500v - 1,000 megohms.

This most advanced insulation and continuity tested incorporates these outstanding advantages:
★ One handed push button operation.
★ 4 in. A.C./D.C. Voltmeter with fine Zero adjustment.
★ Stable & accurate readings.
★ Easy to read scaling.
★ Metal case 7"x5"x3".

Complete with probes, leads and carrying case.

PRICE Only £19 10. 0.
p.p. 5/6

Batteries Included

ALL UNITS DESCRIBED ARE FULLY GUARANTEED
MARRIOT ½ TRACK RECORD/PLAYBACK HEAD

AND MULLARD PERMANENT MAGNET ERASE WITH MOUNTING POST

PRICE
15/- pp. 9d.
THE PAIR

TAPE HEAD SPECIFICATION
- Medium impedance ... 700 ohms at 1Kc/s.
- DC Resistance ... 175 ohms.
- Track width ... 0.090 inches.
- Gap ... 0.0002 inches.
- Maximum output at 3¾ in./Sec. and 2Kc/s. about 1.5 to 2mV.

★ Record/playback head type R/RP/3 and erase magnet type TS 1238 with mounting post.

SPECIAL SCOOP OFFER

★ Brand new stocks—ideal for portable and domestic equipment ★

VHF FM TUNING HEART

SPECIAL OFFER

★ Standard FM coverage.
★ Geared precision tuning.
★ RF amplifier and oscillator stages.
★ Nominal 10 to 15 Mc/s IF output.
★ Requires UCC85 valve (6/6d.)
★ Fully screened unit.

Brand New
In Sealed Boxes 1/5- pp. 1/6d.

SUPPLIED COMPLETE WITH CIRCUIT DIAGRAM

VALUE FOR MONEY BARGAINS
PORTABLE RADIO ACTIVITY COUNTER

- Fully Portable
- Brand New
- Sold at a fraction of original cost

Provides measurement of gamma radiation from 0 to 10.0 milli-roentgens per hour with CV2247 tube supplied. Also available CV2886 Geiger-Muller tube for beta radiation detection of liquids—CV2886 tube 22/6d. Extra. Provision is made for head phones to be plugged in to monitor the count. Batteries supplied have a working life of approximately 600 hours.

★ COMPLETE WITH PROBE UNIT
- HAVER SACK—INSTRUCTIONS
- INDICATING UNIT
- GEIGERMULLER TUBE
- BUILT IN BATTERY SUPPLY

£7 - 10 - 0

Set of batteries 50/-
Post and packing 10/-

QUARTZ FIBRE POCKET DOSIMETERS

★ 0 — 150r 12/6 each.
★ 0 — 500r 12/6 each.

AVAILABLE FROM
HENRY'S RADIO LTD. 303 EDGWARE ROAD, LONDON, W.2
Telephone: PADdington 1008/9

- Electronic Component and Equipment Specialists.
MOBILE P.A. EQUIPMENT
MODELS CA512 AND SC.10F.

★ MODEL CA512 AMPLIFIER
Provides a complete mobile public address equipment. Features 3-inputs for microphones (600 ohm to 150 Kohm), tape input, and record player. Full mixing facilities, tone and volume control. Output impedance 3/4, 7/8 and 15/16 ohm. Response 200 c/s to 8 Kc/s. Sensitivity 4mVolts. Overall size 6½ x 8½ x 2 inches, weight 4 lbs.

★ MODEL SC10F REFLEX HORN SPEAKER Rated 7 to 10 watts. Impedance 4 ohms. One or two in series can be used with above amplifier. Also suitable for use with our 10 watt equipment see page 2.

12 VOLT OPERATION
ALL TRANSISTOR
15 TO 20 WATTS POWER OUTPUT

PRICE
£22
(CA512 Amplifier)

PRICE
5 Gns.
(SC10F Speaker)

TRANSISTOR WALKIE TALKIE
MODEL TR220

3-Transistor Walkie Talkie. Superhet Crystal Controlled circuit with 85mW output. Range up to 1 mile under good conditions. Supplied with batteries, 10 section telescopic arials, leather cases and instructions. Price per pair.

Price £9.19.6 THE PAIR
(SEE PAGE 58)

EAGLE PRODUCTS ITEMS AVAILABLE

★ 8CX50 HI-FI 8 inch Speaker £9.15.0
★ AP801 Audio Panel Speaker System 20 watts. 40-20,000 c/s. 29 x 21 x 4½ in. 2-Woofers (Bass units), 2-Cone Tweeters £15
★ AP601 Audio Panel 10 watts. 5 speaker unit £18
★ TSA18 20 watt per channel transistor stereo amplifier and control unit 49 gns.
★ RX80 Communication receiver 4-wave band superhet. £45
★ CA712 40 watt mobile PA amplifier £55
Transistor Tape Recorders
  TP703 16Gns.
  TR563 14Gns.
  UN406 10Gns.
  MT1000 £8.19.6
★ CL65A clamp. Volt/Ammeter £6.14.6

SEE BACK INSIDE COVER CONCERNING LEAFLETS AND DETAILS.
TRANSISTOR STEREO AMPLIFIER

MODEL TSA218

Price
49 gns.
Carriage Free

A new full function stereo amplifier and pre-amplifier. 18 transistor design with inputs for pickups (2mV to 74mV), tuner 120mV, tape head (3mV) and aux. 120mV. For impedances between 100 K and 160 K ohm.

Fitted bass, treble, volume, loudness, controls' rumble and scatch filters, input selector, balance control, mode switch, speaker phase switch.

Power Output
20 watts per channel for 3 to 5 ohm Speakers
16 \ldots 7 to 8 ohm
13 \ldots 15 to 16 ohm

Frequency Response. 18c/s to 22 Kc/s ±1dB.

Signal to Noise. Between 60 and 80dB — Depends upon Input used.

Operates from 115 volt to 240 volt AC Mains.

Overall Size 13\frac{1}{2} \times 9\frac{1}{2} \times 3\frac{1}{8} ins.

FULLY GUARANTEED

15 WATTS MONOAURAL
OR 7\frac{1}{2} \pm 7\frac{1}{2} WATTS STEREO.

7-Valve design with inputs for pickups, tape, tuner and auxiliary. Sensitivities between 3\frac{1}{2} mV and 500mV from 50 Kohm to 2 Megohm. Output to 3 or 4, 7 to 8 and 15 to 16 ohm speakers. Controls include treble, bass, volume, balance, selector, rumble filter, mode switch, speaker phasing etc. Harmonic distortion less than 1\% at 1 Kc/s at 10 watts. Response ±0.5dB, 30 c/s to 25 Kc/s. Hum and noise more than 60dB below rated output.

(Similar in appearance to model illustrated)

FULLY GUARANTEED

SUPPLIED COMPLETE WITH FULLY DETAILED AND ILLUSTRATED INSTRUCTION MANUALS

MODEL FMT640

VHF FM TUNER

Price
£23.3.0
(Including P.T.)
Carriage Free


Seven value plus rectifier superhet design covers 88 to 108 Mc/s. Armstrong circuit with dual limiters and wide band discriminator.

Sensitivity : 2 Microvolt FM 20dB queuing.
Selectivity : 200Kc/s band with at 6dB donn.
Harmonic Dist : Less than 1\%.
Hum Level : 58dB.
IF Rejection : 70dB.
Image Rejection : Better than 40dB.
Response : 20-20,000 c/s.
Aerial Input : 300 ohm unbalanced.
Tuning Indicator : FM Signal strength level meter.
Dimensions : 11 \times 7\frac{1}{2} \times 3\frac{1}{8} ins.

VALVES
(1) 6AQ8 RF Amplifier.
(2) 6BA6 1st, 2nd, IF
(2) 6AU6 1st, 2nd, limiter.
(1) 6ALS Discriminator PLUS RECTIFIER.

MODEL SA200

VALVE STEREO AMPLIFIER

Price
£26.10.0
Carriage Free

FULLY GUARANTEED

SUPPLIED COMPLETE WITH FULLY DETAILED AND ILLUSTRATED INSTRUCTION MANUALS
Sinclair MICRO-6 Personal POCKET RADIO

★ 6-STAGE SENSITIVITY
★ SELF CONTAINED AERIAL AND BATTERY
★ PLAYS ANYWHERE—FULL MEDIUM WAVE

TOTAL COST OF ALL PARTS 59/6 POST FREE

★ 3-TRANSISTORS AND 2-DIODES
★ PRINTED CIRCUIT CONSTRUCTION
★ COMPLETE WITH PERSONAL EARPHONE AND INSTRUCTIONS

YOU HAVE SEEN IT ADVERTISED

PERSONAL POCKET RADIO

★ FULL MEDIUM WAVE TUNING
★ 2-TRANSISTORS AND 2-DIODES
★ PRINTED CIRCUIT

TOTAL COST OF ALL PARTS WITH EARPHONE 49/6 POST FREE.

SIMPLE TO BUILD—EASY TO USE RADIO

SINCLAIR MICRO-INJECTOR KIT

A rapid and dependable instrument for tracing faults in Valve or Transistor Radio and Audio Equipment.

Using two MICRO-ALLOY TRANSISTORS, this precision sub-miniature instrument generates and injects a test signal into any part of a receiver or amplifier at any frequency from 1 Kc/s to 30 Mc/s. By this means the location of any fault can be rapidly found.

Powered by a 6d. standard battery which will last for about 6 months. Assembly is extremely simple and will take even a beginner only half an hour.

Total cost of all parts including 2 M.A.T.S., probe, case and full instructions.

Output from 1Kc/s to 30 Mc/s.

FOR SPEEDY AND ACCURATE FAULT TRACING

27/6 POST FREE

TYPE ZM312

MALLORY 6-CELL PACK OFFER
Single Mallory Mercury Cells, 1/11 each. Pack of 6, at special price of 10/6 pp. 6d.
NEW SINCLAIR X-10  10 WATT TRANSISTOR AMPLIFIER

The Sinclair X-10 is a high fidelity integrated power amplifier and pre-amp using 11 transistors and having a transformerless output of 10 watts for feeding into a 15 ohm loudspeaker system. It requires only the addition of tone and volume controls plus a twelve volt D.C. power supply to make it a complete mono high fidelity assembly of exceptional quality. Stereo is achieved by using two X-10 amplifiers and ganged or separate controls. Input sensitivity is sufficient for all crystal or magnetic pick-ups and the manual supplied with the X-10 gives detailed instructions for connecting the controls and for using the amplifier in a wide variety of applications.

This radically new transistor amplifier (patents applied for) is the first to be marketed anywhere in the world using the pulse width modulation principle (P.W.M.) as described by D. R. Birt in “Wireless World,” February, 1963. This technique permits an enormous reduction in the power dissipation in the output transistors of an amplifier; and in the case of the Sinclair X-10, the output efficiency is about 95% as compared with about 60% for conventional class B output stages. Thus the dissipation is only 1/4th or less of that occurring in all other amplifiers. That is why no heat sink is required for the output stage, why small high frequency transistors can be used in place of the conventional low frequency power transistors and why the X-10 will operate from two 4½ batteries with normal use for about 3 months.

★ No heat sink.
★ Add your own choice of tone control circuit.
★ Input Sensitivity 1mV.
★ Total harmonic distortion <0.1%.
★ Output power 10 watts.
★ Frequency response 5-20,000 c/s ±0.5dB.
★ Speaker impedance 15Ω.
★ Damping factor Greater than 100.
★ Quiescent consumption 75mA.
★ Supply voltage 12 to 15 volts.

Price, inclusive of all parts and Instruction Manual for building X-10.
Ready Built and Tested including Instruction Manual
Mains Power Supply Unit (A.C. 200/240V)

NEW DESIGN, PRINCIPLES, PERFORMANCE

Price 39/6 Post Free.

SINCLAIR TR750 POWER AMPLIFIER PERFECT FOR USE WITH THE MICRO-6 AND SLIMLINE

Measuring only 2 x 2in. and having its own built-in volume control and on/off switch, the TR750 has a full 750 milliwatt transformer less output for 10mV into 10K ohms. Frequency response is from 30 to 20,000 c/s within ±1dB. This amplifier makes a powerful car, domestic or portable radio used with the Micro-6 or Slimline receivers, or a hi-fi record reproducer used singly or paired for stereo. There are many other uses for the TR750, which is available for building. All parts with instructions come to

BUILD AN F.M. TRANSMITTER WITH THE SINCLAIR MICRO MICRO-AMPLIFIER

Smaller than a 3d. piece! Frequency response 30 to 50,000 c/s ±1dB. Power gain 60 dB (1,000,000 times) Instructions show you how to make a broadband R.F. amplifier, F.M. transmitter or a sub-miniature hi-fi amplifier with an output suitable for any earpiece or even loud-speaker.

Smaller than a 3d. piece. Parts and instructions come to 28/6
CN3 CROSSOVER

Provides matching from amplifier to bass speaker and tweeter or to bass speaker, mid range speaker and tweeter. Cross over frequencies 500 c/s and 3300 c/s. Fitted treble and mid-range 'L' pad level controls. 15 to 16 ohms impedance.

Price 99/6 pp. 2/6

HT40 HORN TWEETER

High fidelity high performance professional tweeter. Frequency range: 3,000 c/s to 20,000 c/s. Crossover frequency can be between 3500 c/s and 10 Kc/s. Impedance 15/16 ohm. Sensitivity 108dB, input 20 watts. Flux density 17000 gauss.

Price 89/6 pp. 2/-

★ SPECIAL HI-FI SPEAKER BARGAINS

- 12 inch 15 ohm 6 watt with HF cone. Large magnet 39/6 pp. 2/6
- 12 inch 3 ohm as above 39/6 pp. 2/6
- 13½ x 8½ 6 watt 3 ohm 39/6 pp. 2/6
- 13½ x 8½ 6 watt 15 ohm 39/6 pp. 2/6

(See also pages 74 to 77 and 46)

MODEL AST1 TRANSISTOR MEDIUM WAVE AND SHORT WAVE TUNER

Operates from 9 volt battery. Frequency coverage medium wave band 530-1600 Kc/s and 4.5 to 12 Mc/s shortwave band. Four transistor superhet circuit with output up to 250mV. Supplied built and tested ready to be used with any transistor or valve amplifier.

Price £7.9.6 Post Free.

EMI HI-FI SPEAKER

A complete loudspeaker system on one frame combining two critically matched ceramic magnet speakers with a low loss crossover network. Peak handling power 10 watts; Impedance 15/16 ohms; Flux density 11,000 gauss; resonance 40-60c/s. Frequency range 50c/s to 20 Kc/s. Size 13½ x 8½ x 4½ inches.

Price £6.19.6 pp. 3/-

Price £10.19.6 pp. 2/-

DC VOLTS : 0½/2½/10/50/250 (100,000 ohms/volt)
DC CURRENT : 0/5/0.1/1000 volts (20,000 ohms/volt)
AC VOLTS : 0/10/microamp. 0/1/25/250mA. 0/10Amp.
RESISTANCE : 0/24/10/50/250/1000 ohms (10,000 ohms/volt).
DECIBELS : -20 to +10dB, +10 dB to +22dB.
CAPACITY : 0.001 mf to 0.1 mf.
INDUCTANCE : 100H to 5000H.
ACCURACY : Approximately ±3%.
SIZE : 6½ x 4½ x 2½ inches.

100,000 ohms per volt

Complete with batteries
Test Leads and Full Instructions
(Leather case 29/6)

CROSSOVER - SPEAKERS - TWEETER - TUNER - MULTI-METER
THE FOLLOWING DETAILED LEAFLETS ARE AVAILABLE.

All prices are post paid.

†3d. per 4 leaflets.
* Circuit diagrams included.

- The following are detailed in a 24 page two colour supplement Price 3/- Post paid.

P10. 1½ and 4 Watt Packaged Amplifiers
P11. Mini-Gram Player
P12. Martin Tape Preamp.
P13. Martin 2 and 4 Track Recordakits
P14. Martin Transistor Audiotax
P15. Weymouth MW/LW Superhet
P16. FM/AM Prebuilt Units
P65. TP55 and 500 Meters
P66. Valve Voltmeter
P67. Insulation Tester
P68/69. Nombrex Equipment Total 5 Types
P71. Garrard Battery Tape Deck
P75. Goodmans Speakers
P76/77. WB Stentorian Speakers
P82. TSL Sundown
P88/89. Sinclair Equipment. Total 6 Types

PLUS HUNDREDS OF OTHER ITEMS AVAILABLE.

COMPONENTS
TEST EQUIPMENT
QUARTZ CRYSTALS
TRANSISTORS VALVES
HI-FI EQUIPMENT

COMPRESSIVE STOCKS AT REALISTIC PRICES
ALWAYS AVAILABLE — CALL IN AND SEE US

OUR NAME FOR QUALITY AND
VALUE FOR MONEY IS YOUR GUARANTEE