

MARCONI

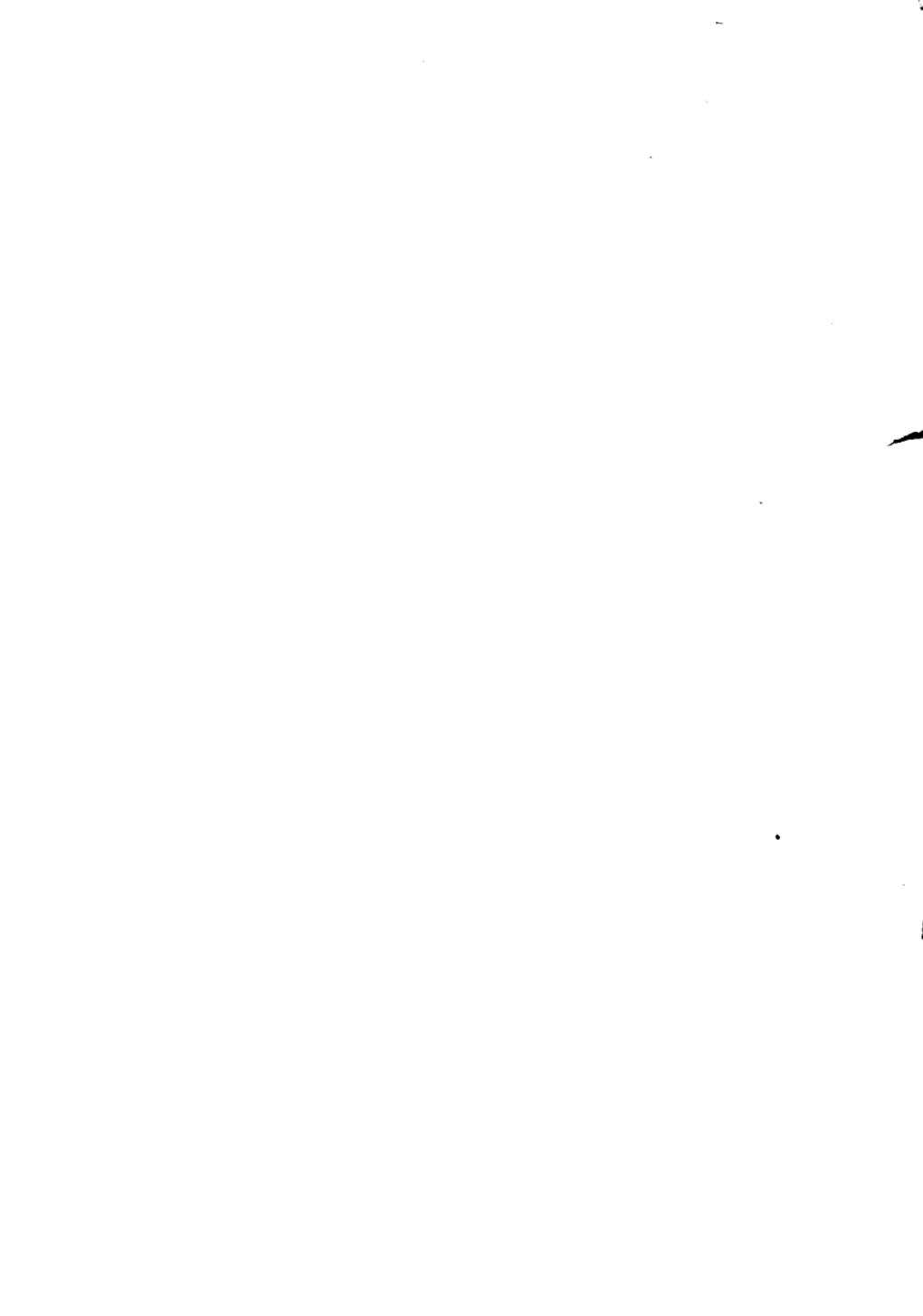
VALVES



GREAT VALVES THAT LIVE UP TO A GREAT NAME

A stylized signature logo for "G. Marconi". The letters are written in a flowing, cursive script. The letter "G" is prominent at the beginning. The entire signature is set against a dark, circular background.

THE WORLD FAMOUS TRADE MARK OF THE MARCONIPHONE COMPANY LIMITED



Introduction . . .

YET again important progress in valve design is revealed in this new Marconi Catalogue.

Recent developments leading to greater interest in the ultra short waves are reflected in the new triode-hexode frequency changers and efficient h.f. pentodes, among which the novel diode combination is of special interest.



We are always ready to assist users of Marconi valves in their radio circuit problems, on receipt of full details addressed to the Valve Department, Marconiphone Co. Ltd., 210, Tottenham Court Road, London, W.I.

SUBJECT INDEX

	Page
Valve Type Index - - - - - - -	2
2 volt battery Valves - - - - - - -	3-9
4 and 6 volt battery Valves - - - - - - -	33
A.C. Mains Valves - - - - - - -	10-21
D.C. Mains Valves - - - - - - -	33
Universal Valves - - - - - - -	22-27
Rectifiers and Barretters - - - - - - -	28-32
Valve base diagrams - - - - - - -	34-35
Circuit Diagrams - - - - - - -	36-40
Marconi Valve Equivalents - - - - - - -	41
Marconi Valves for all sets - - - - - - -	42-48

Valve Index

2-VOLT BATTERY RANGE.

Type	PURPOSE	Met.	No. or of	Clear	Pins	Price	Page
X21	Heptode	...	MC	7	18/6	3	
S23	Screen Grid	...	MC	4	12/6	4	
S24	"	...	MC	4	12/6	4	
VP21	Var. Mu. H.F. Pen.	M	7	13/6	5		
VS24	Var. Mu Scr. Grid	MC	4	12/6	6		
VS2	" " "	MC	4	12/6	5		
HD21	D'ble-Diode-Trio.	MC	7	9/-	6		
HD22	" " "	MC	7	9/-	6		
H2	High Mag. Triode	MC	4	5/6	7		
HL2	General Purpose	MC	4	5/6	7		
HL2/K	" "	MC	4	5/6	7		
HL210	" "	MC	4	5/6	7		
L21	L.F. Triode	...	C	4	5/6	7	
LP2	Power Triode	...	C	4	7/-	8	
P215	" "	C	4	7/-	8		
P2	Super Power Trio.	C	4	12/-	8		
PT2	Power Pentode	...	C	5	13/6	8	
B21	Class B	...	C	7	14/-	9	
QP21	Double Pentode	C	7	22/6	9		

A.C. MAINS RANGE.

X41	Triode Hexode	...	MC	7	20/-	11
MX40	Heptode	...	MC	7	20/-	11
MSP4	H.F. Pentode	...	M	5 & 7	17/6	12
MS4	Screen Grid	...	MC	5	17/6	12
MS4B	High Slope S.G....	MC	5	17/6	12	
MS4B/K	" "	MC	5	17/6	12	
VMP4	Var. Mu H.F. Pen.	M	5 & 7	17/6	13	
VMP4/K	" "	M	7	17/6	13	
VMP4G	" "	M	7	17/6	13	
VMS4	Var. Mu. S.G.	...	MC	5	17/6	14
VMS4/K	" "	MC	5	17/6	14	
VMS4B	" "	MC	5	17/6	14	
WD40	D.D. H.F. Pen	...	M	9	20/-	15
MHD4	D'ble-Diode-Trio.	MC	7	15/6	15	
D41	Double Diode	...	MC	5	5/6	17
MH4	Triode	...	MC	5	13/6	16
MH4/K	"	...	MC	5	13/6	16
MH41	High Slope Triode	MC	5	13/6	16	
MHL4	Triode	...	MC	5	13/6	15
ML4	"	...	C	5	14/-	16
N41	High Slope Pen...	C	7	18/6	17	
DN41	D.D. Pentode	...	C	7	21/-	17

A.C. MAINS RANGE (continued).

Type	PURPOSE	Met.	No. or of	Clear	Pins	Price	Page
MPT4	Output Pentode	C	5 & 7	18/6	18		
MPT4/K	" " "	C	5 & 7	18/6	18		
PT4	" " "	C	5	18/6	18		
PX4	Power Triode	...	C	4	16/6	19	
PX25	Power Triode	...	C	4	25/-	20	
PX25A	" " "	C	4	25/-	20		
PT25	Power Pentode	...	C	5	45/-	19	
DA60	High Power Trio.	C	4	110/-	21		
DA100	" " "	C	4	210/-	21		

UNIVERSAL RANGE.

X31	Triode Hexode	...	MC	7	20/-	23
X30	Heptode	...	MC	7	20/-	23
X32	" " "	...	MC	7	20/-	23
W30	Var. Mu H.F. Pen.	MC	7	17/6	24	
W31	" " "	MC	7	17/6	24	
WD30	DD.H.F. Pen.	...	M	9	20/-	25
H30	High Slope Triode	MC	7	13/6	27	
DH30	D'ble-Diode-Trio.	MC	7	15/6	25	
N31	High Slope Pen....	C	7	18/6	26	
N30	Output Pentode	C	7	18/6	26	
N30G	" " "	C	7	18/6	26	
U30	I.H. Rectifier	...	C	7	15/-	27
301	Barretter	...	C	4	12/6	32

D.C. MAINS RANGE.

DS	Screen Grid	...	MC	5	17/6	33
DSB	High Mu S.G.	...	MC	5	17/6	33
VDS	Var. Mu. S.G.	...	MC	5	17/6	33
VDSB	" " "	...	MC	5	17/6	33
DH	Triode	...	MC	5	13/6	33
DHD	D'ble-Diode-Trio.	MC	7	15/6	33	
DL	Low Power Triode	C	5	14/-	33	
DPT	Output Pentode	C	5 & 7	18/6	33	
251	Barretter	...	C	4	12/6	33

RECTIFIERS.

UI10	Full Wave Rectifier	...		4	12/6	31
UI12	" " "	...		4	15/-	29
MUI12	" " "	(IH)		4	15/-	29
UI14	" " "	...		4	20/-	30
MUI14	" " "	(IH)		4	20/-	30
GUI	Half Wave Mercury Vapour	...		4	25/-	31

When ordering, state whether metallised or clear, and, where two bases are available, state number of pins.

Information on Valves not in this list may be obtained on request.

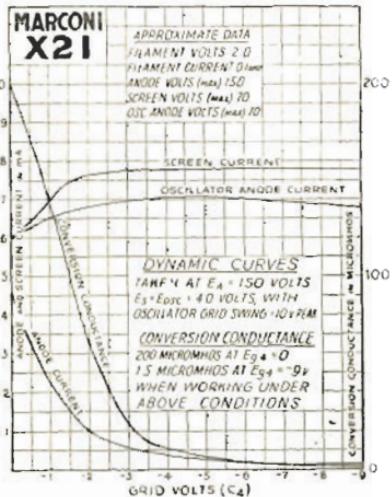
Marconi Battery Valves



**Marconi HD2I
Double Diode
Triode.**

A 2-volt valve for every worth-while circuit! In these following pages you will find such a selection, which is also supplemented by special types such as the Midgets, etc., details of which are available on request to the Valve Department.

If you are a short wave enthusiast, write to us for some useful notes on the subject.



Marconi X21

2 volt Heptode

Marconi X21 is a 2 volt Heptode with a high value of Conversion Conductance combined with a minimum H.T. Battery consumption.

The Variable Mu characteristic is so proportioned that adequate control is obtained with the usual value of A.V.C. voltage available, without risk of rectification or harmonic distortion. Using the X21 as a frequency changer, it becomes possible to construct a 3-6 valve superhet with A.V.C. for Battery operation.

Price 18/6

Anode Volts	Screen Volts	Oscill. Anode Volts	Grid Bias	Anode Current	Screen Current	Oscill. Anode Current	Conversion Conductance
150	40	40	-0 v -9 v	0.45 m.a. —	0.6 m.a. 0.78 m.a.	0.6 m.a. 0.68 m.a.	200 Micromhos 1.5 Micromhos

7 pin base.

Overall Dimensions, 130 x 45 mm.

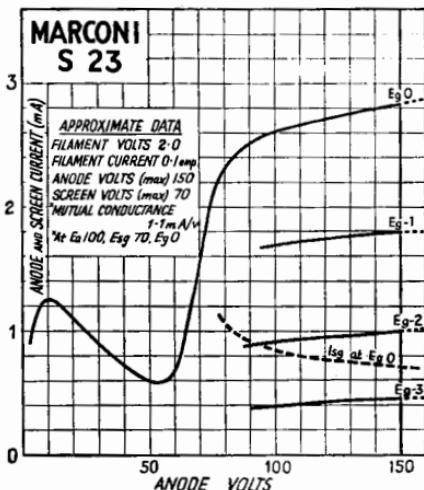
Marconi S23

2 volt Economy Screen Grid Valve

Marconi S23 is a screen grid valve designed particularly for receivers in which minimum H.T. consumption is essential. It is suitable for the majority of circuits employing one or two screen grid stages, especially in portable receivers.

The new construction reduces microphony to a remote contingency, as the entire electrode system is rigidly bonded.

Price 12/6



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
100-150	50 to 70	0 to -1½	1.4 to 2.8	0.2 to 0.7

Overall Dimensions,
130 × 50 mm.

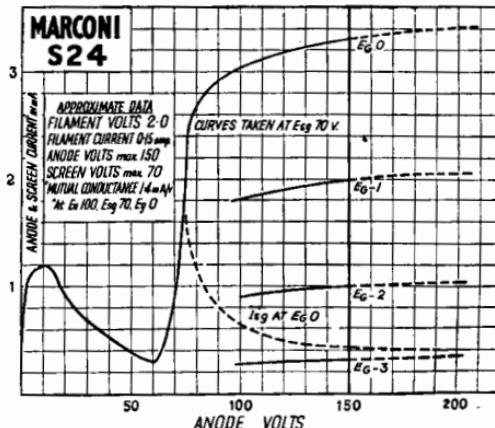
Marconi S24

2 volt Screen Grid Valve

Marconi S24 is a screen grid valve for circuits in which a high stable gain is required in conjunction with freedom from microphony.

It is also an excellent detector-oscillator, the cathode coupling method being recommended. In such circuits the clear glass valve should be used.

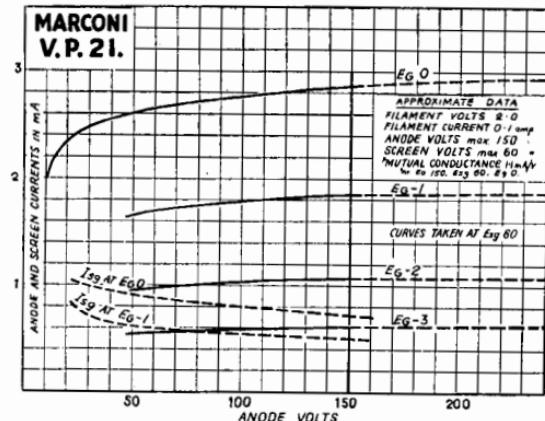
Price 12/6



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
100-150	50 to 70	0 to -1½	1.4 to 3.3	0.4 to 0.7

Overall Dimensions,
130 × 50 mm.

**MARCONI
V.P. 21.**



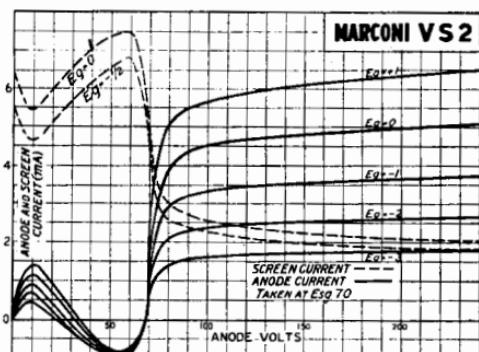
Marconi VP21

2 volt Variable Mu H.F. Pentode

Marconi VP21 Variable Mu H.F. Pentode brings the latest circuit developments within reach of the battery set user, enabling him to take full advantage of the selectivity offered by iron core coils, etc. The separate pin for the metal coating renders it possible for a metallised valve to be used as a frequency changer with cathode coupling.

Circuit	Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current	Price
H.F. Amplifier	100-150	50-60	0 to -9	2.9 max.	0.7 max.	13/6

Overall Dimensions, 130 x 50 mm.



Marconi VS2

A Variable Mu Valve

A Variable Mu valve specially suited to multi-valve circuits, having a longer grid base than VS24, and a maximum slope of 1.25 mA/v. It will therefore handle greater inputs without rectification, and is useful for avoiding cross-modulation in the first stage. A grid battery of 9 to 16 volts is recommended.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
100-150	50-70	0 to -15	5.0 max.	2.0 max.

Overall Dimensions, 130 x 50 mm.

Price
12/6

Marconi VS24

2 volt Variable Mu Screen Grid Valve

Marconi VS24 is a Variable Mu Screen Grid Valve, having a shorter grid base than the VS2. A full range of manual control is obtained with a 9 volts grid bias battery.

The short grid base of the VS24 makes it particularly suitable for use in the high and intermediate frequency stages of receivers equipped with Automatic Volume Control.

Price 12/-

Overall Dimensions, 128 × 45 mm.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
100-150	60-75	0 to -9	4.4 ma. max.	0.3 ma. max.

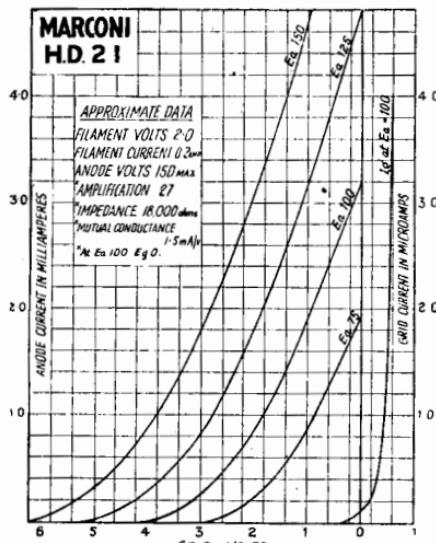
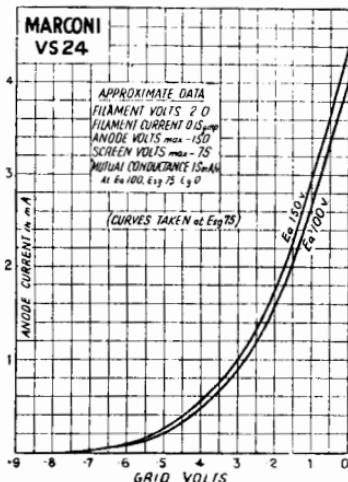
Marconi HD21 and HD22

2 volt Double Diode Triodes

Marconi HD21 and HD22 each comprise a double diode and a high slope triode assembly in one bulb. These recent additions to the Marconi 2v. Battery range provide diode rectification, followed by subsequent L.F. amplification and delayed Automatic Volume Control—features which have hitherto been found in mains receivers only. The valves differ only in the diode pin connections.

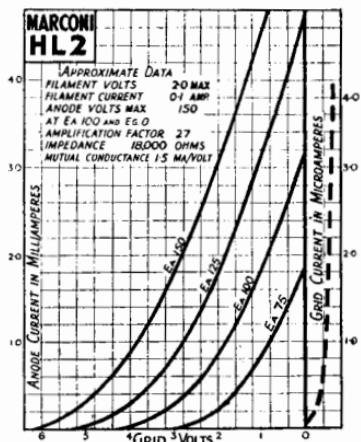
Price 9/- each

Anode Volts	Grid Bias	Anode Current
100	-1½	1.4 m.a.
125	-3	0.8 m.a.
150	-3	1.8 m.a.



Overall Dimensions, 125 × 45 mm.
5 pin base

**MARCONI
HL2**



Marconi HL2 & HL2/K

2 volt General Purpose Triodes

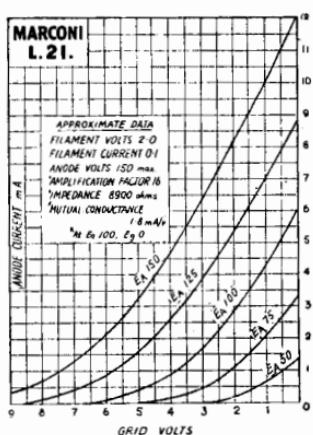
Marconi HL2 is a high efficiency non-microphonic general purpose valve suitable for use as a detector, low frequency amplifier or oscillator.

HL2/K is a more compact version of HL2, with improved non-microphonic properties.

Circuit	Anode Volts	Grid Bias
Detector LG	60-150	Leak to Filament —
Detector AB	100-150	-1½ to -4½
Amplifier	100-150	-1½ to -3

Price **5/6**

**MARCONI
L.21.**



Marconi L21

2 volt General Purpose Triode

Marconi L21 is a new high efficiency valve having characteristics which make it a particularly sensitive "Class B" driver or low frequency amplifier.

Its low impedance permits of maximum transformer ratio, resulting in the greatest possible sensitivity.

Circuit	Anode Volts	Grid Bias
L.F. Amplifier or Class B Driver Detector AB ...	100-150 75-150	-3 to -6 -4½ to -10½

Overall
Dimensions
100 x 42 mm.

Price **5/6**

MARCONI HL210

General Purpose Triode

Marconi HL210 has a slightly lower efficiency than the HL2. Suitable for use in H.F. stages of portable sets.

Price **5/6**

MARCONI H2

High Impedance Triode

Marconi H2 has a high amplification factor and may be used as a high magnification detector or as a resistance capacity coupled amplifier. Amplification factor 35.

Price **5/6**

Marconi LP2

2 volt Output Triode

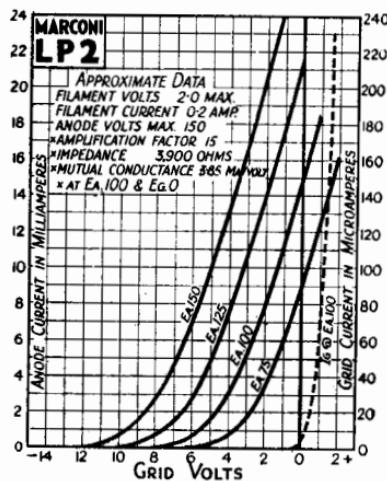
Marconi LP2 is a power output valve with a very high amplification factor combined with a normal value of impedance, thus providing stage magnification comparable with that of a pentode. Its high sensitivity and very small H.T. consumption render the LP2 ideal for the output stages of portable and similar receivers.

Overall

Dimensions,
110 x 45 mm.

Price 7/-

Anode Volts	Grid Bias	Anode Current
100	-3	5 m.a.
125	-4½	6 m.a.
150	-6	7 m.a.



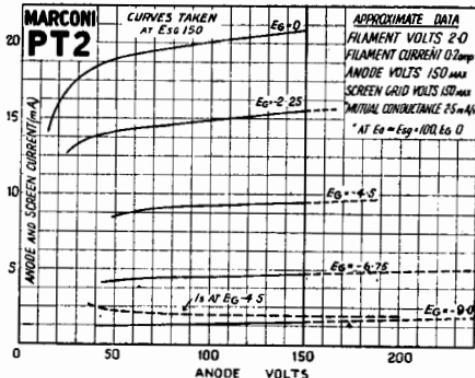
Marconi PT2

2 volt Output Pentode

Marconi PT2 is a highly sensitive and economical output pentode, providing adequate output for a moving coil speaker from a small input. All Marconi PT2 valves are now coded to simplify Q.P.P. working.

Price 13/6

Anode Volts	Screen Volts	Grid Bias	Anode Current
100	100	-3	3.5 m.a.
125	125	-3	6.5 m.a.
150	150	-4½	9.5 m.a.



Overall Dimensions,

110 x 50 mm.

5 pin base

MARCONI P215

Marconi P215 is a favourite output valve for portable and other sets having two L.F. stages, where its rather larger grid base lessens the risk of overloading on nearby stations. Amplification factor 7.

Price 7/-

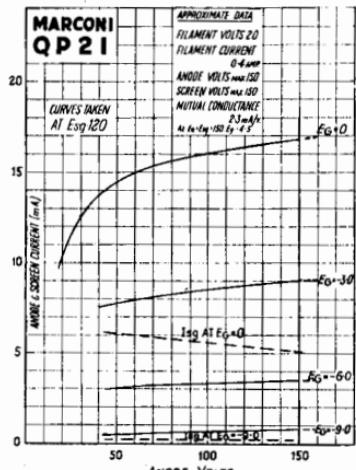
MARCONI P2 Super Power Valve

P2 is an improved type of super-power output valve, modest in its requirements for H.T. current and providing excellent amplification. It is exceptionally suitable for the operation of sensitive moving coil speakers, its impedance generally matching the average instrument of this type.

Price 12/-

Marconi QP21

2 volt Double Output Pentode

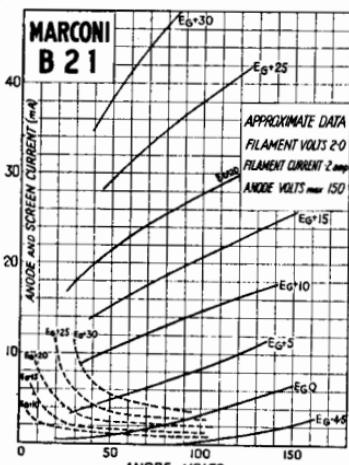


Marconi QP21 comprises two accurately matched pentode systems in one bulb and is intended for operation in Q.P.P. output stages of Battery receivers.

The common screen connection simplifies initial adjustments and ensures constancy of matching throughout life, while the characteristics are such that quality is maintained at all values of output.

Overall Dimension, 120×50 mm. 7 pin base.

Anode and Screen Volts	Total Quiescent Anode and Screen Current	Anode to Anode Impedance Ohms	Negative Grid Bias Volts	Estimated mean H.T. Current (Anode and Screen) m.a.	Price
100	3 m.a.	28,000	6	4.0	
120	5 m.a.	28,000	7.5	7.0	
150	4.3 to 7.6 m.a.	24,000	10.5 to 9	7.0-9.0	22/-



Marconi B21

"Class B" Output Valve

Marconi B21 is a Class B double triode valve possessing important advantages over types hitherto available.

Operating with a small grid bias, B21 gives better quality, smooth and free from "edge." The input impedance is as much as four times greater, so that the drive transformer ratio may be up to double that employed with the zero bias valve—add to this that the power drawn from the driver is less, and the improved sensitivity is realised.

Overall Dimensions,
115×42 mm.
7 pin base.

Anode Volts	Grid Bias	Driver Valve	Driver Bias	Transformer Ratio	Price
100	-3	L21	-3	1.5/1	
120	-3 to $-\frac{1}{2}$	L21	-3	1/1	
150	$-\frac{1}{2}$ to 6	L21	$-\frac{1}{2}$	1/1	14/-

Marconi A.C. Valves



Marconi X41
Triode Hexode

of screened pentode with the grid taken to the top of the bulb and two diodes added at the lower end of the cathode.

New high slope output pentodes appear, and a general change to dome-topped bulbs adds to the rigidity of many types.

If you have a problem connected with an A.C. receiver, and use or intend to use Marconi valves, let us help you.

Write to the Valve Department, Marconiphone Co. Ltd., 210-12, Tottenham Court Road, London, W. I.

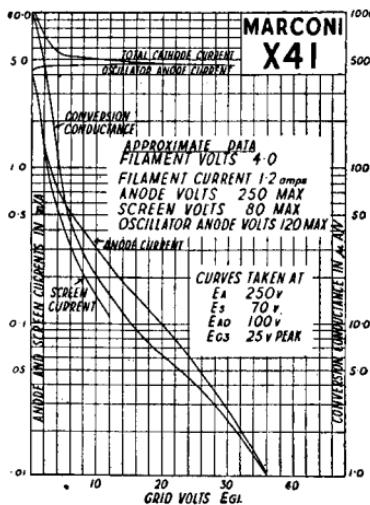
THE growing interest in short waves is catered for in the Marconi range for 1935-36 by the introduction of several new types.

First is the triode-hexode, an improved frequency changer which will operate efficiently up to television transmission frequencies.

Second are new radio frequency amplifying valves : the VMP4G with low grid-anode capacity, and the WD40, which is an entirely new type



Marconi DN41
Double Diode High
Slope Output Pentode



Marconi X41

Triode Hexode

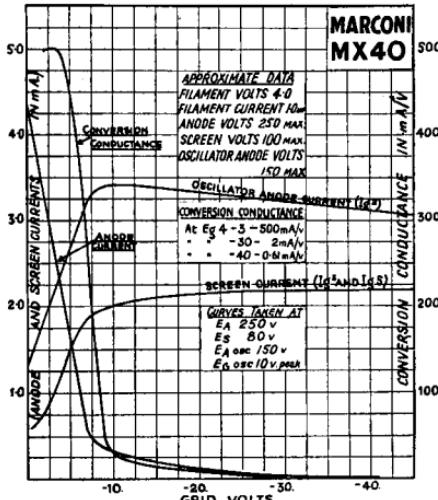
X41 consists of a triode oscillator combined with a hexode, the third grid of which is internally connected to the triode grid. It is an excellent frequency changer both on broadcast and ultra short wave bands, showing remarkable freedom from pulling, etc. Further details available on request.

7 pin base.

Overall Dimensions, 130 × 45 mm.

Price 20/-

Anode Volts	Screen Grid	Oscill. Anode Volts	Grid Bias	Anode Current	Screen Current	Oscill. Anode Current	Conversion Conductance (Micromhos)
250	70	100	-1.5	1.8	1.7	4.5	550
250	70	100	-25	.05	—	4.6	3.5
250	70	100	-35	—	—	4.5	1.0



Marconi MX40

Heptode

Marconi MX40 is a Heptode with the high conversion conductance of 500 micromhos.

The tetrode section has a Variable Mu characteristic giving rapid gain control when used in A.V.C. circuits, obviating cross modulation and overloading on strong signals.

7 pin base.

Overall Dimensions, 130 × 45 mm.

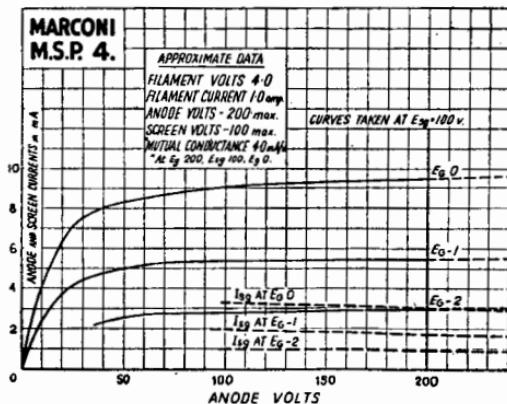
Price 20/-

Anode Volts	Screen Volts	Oscill. Anode Volts	Grid Bias	Anode Current	Screen Current	Oscill. Anode Current	Conversion Conductance (Micromhos)
250	80	150	-3	2.7 m.a.	1.0 m.a.	2.1 m.a.	500
250	80	150	-30	—	2.2 m.a.	3.2 m.a.	2
250	80	150	-40	—	2.2 m.a.	3.15 m.a.	0.61

Marconi MSP4

H.F. Pentode

MSP4 has an exceptionally high slope, combined with a high working impedance which is of value with efficient circuits such as are used increasingly in modern design. Normally the 7 pin base valve is recommended, as it enables the metal coating to be earthed directly, and provides a means of controlling the suppressor grid voltage.



Anode Volts	Screen Volts	Grid Bias	Current Anode	Screen Current
200	80 to 100	-1 to -2	4	1 mA.

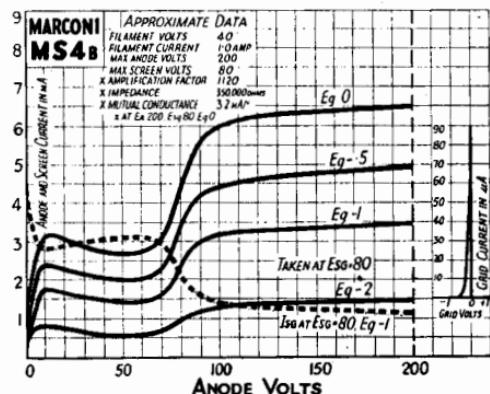
5 or 7 pin base. Overall Dimensions, 140×45 mm.

Price 17/6

Marconi MS4B

Screen Grid Valves Glass and Catkin

Hundreds of thousands of Marconi MS4B's are in use. This valve is a first choice for the single H.F. stage receiver, especially of the popular three valve type. It has a low grid-anode capacity which assists in obtaining high amplification with stability.



Catkin MS4B is known for its non-microphonic rigidity, due to the metal construction.

Anode Volts	Screen Volts	Grid Bias
200	80	-2

Price 17/6

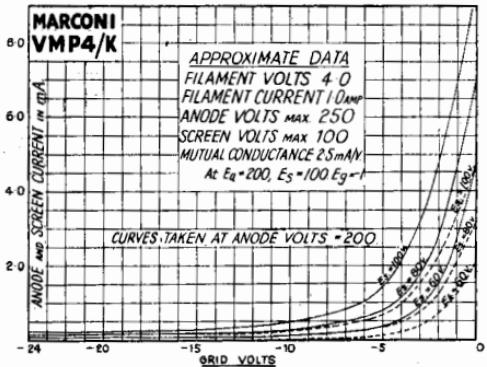
5 pin base. Overall Dimensions, 140×45 mm. (Glass)
120×33 mm. (Catkin).

MARCONI MS4

Screen Grid Valve

A low slope screen grid valve for older receivers where MS4B would give too high a gain. Slope 1.1 mA/v.

Price 17/6



7 pin bases.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	100	-1 -25	7 m.a. 0.25 m.a.	4.3 m.a. —

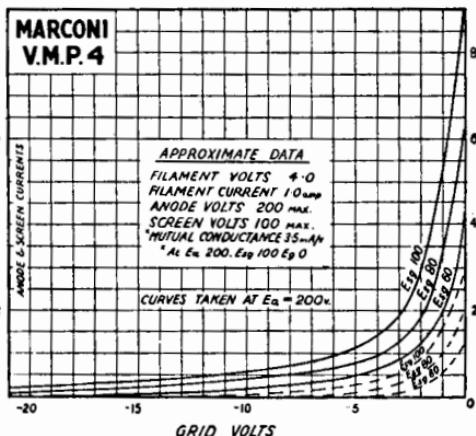
Marconi VMP4/G and VMP4/K

Glass and Catkin

Marconi VMP4/G and VMP4/K are Variable Mu H.F. pentodes incorporating the latest requirements of high slope and medium grid base, providing ample range of control in A.V.C. circuits. The anode-grid capacity is exceptionally low, at .0025 μMF .

Overall Dimensions
128 x 38 mm. (Catkin)
140 x 45 mm. (Glass)

Price
17/6
each



Marconi VMP4

Variable Mu H.F. Pentode

This H.F. pentode has a high slope and short grid base. It has the same rapid control as VMS4B, and possesses a high working impedance. Despite the high slope, the working anode and screen currents are well below those of the comparable screen grid valve.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	100	-1 -20	5.5 0.25	1.5 —

5 or 7 pin base.

Overall Dimensions,
140 x 46 mm.

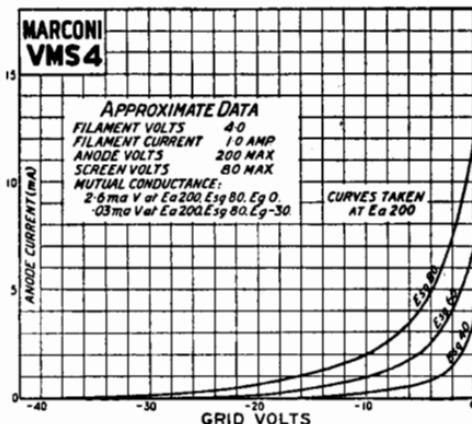
Price **17/6**

Marconi VMS4

Variable Mu Screen Grid Glass and Catkin

Most of the receivers built to use Variable Mu Screen Grid valves having a 30-40 volt grid base will operate excellently with Marconi VMS4. Its medium slope and 30 volt base give a smooth control, yet a large input is handled without serious rectification.

The Catkin version with all-metal construction, is very rigid and compact.



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	80	-2 -30	7½	2

5 pin base.

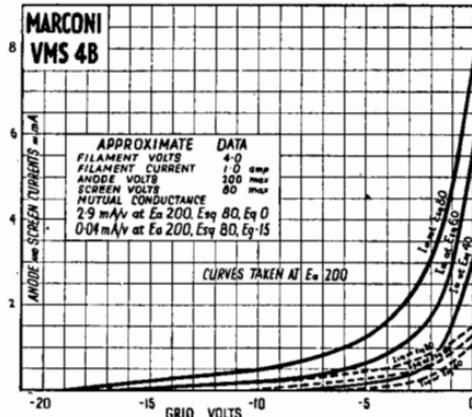
Overall Dimensions, 140×45 mm. (Glass)
125×33 mm. (Catkin)

Price
17/6
each

Marconi VMS4B

Variable Mu Screen Grid

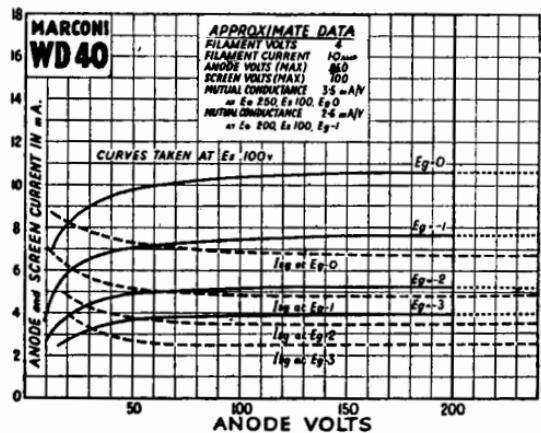
This Screen Grid valve of the Variable Mu type has a short grid base, providing the rapid change of amplification which is called for in A.V.C. circuits where only one or two stages are controlled. It has also a higher slope than usual in its class. Recommended for single H.F. stages with manual bias control, and for the I.F. stages of super-heterodyne circuits.



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	80	-1 -15	5 0.25	1.2 —

5 pin base. Overall Dimensions, 140×45 mm.

Price
17/6



Marconi WD40

H.F. Pentode—D. Diode

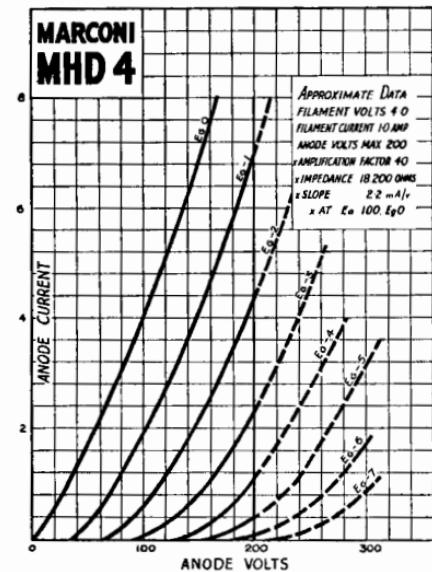
This is an entirely new type comprising an efficient H.F. pentode and a double diode. The grid of the pentode is taken to the top cap. WD40 may be used efficiently in straight and reflexed circuits.

9 pin base.

Overall Dimensions, 135 x 44 mm.

Price

20/-



Marconi MHD4

Double Diode Triode

Marconi MHD4 is a double diode triode, comprising an MH4 with two small shielded diodes suitable for the rectification of radio frequency signals. It may be used in straight or super-heterodyne circuits, as a detector and L.F. amplifier; also for automatic volume control, delayed, quiet or amplified. Used in a number of well known receivers, MHD4 is an essential unit of up-to-date, high quality circuits. It is fitted with a 7 pin base.

Anode Volts	Grid Bias	Anode Current
200	-3	2.4 m.a.

Overall Dimensions,
130 x 45 mm.

Price **15/6**

MARCONI MHL4

Triode

MHL4 has a slope of 2.5 and $M=20$. Suitable as detector, oscillator or amplifier.

Price **13/6**

Marconi MH4

Triode

Glass and Catkin

In the most popular class of detector valves for the past two years, MH4 unites a high slope with sturdy non-microphonic construction and a medium impedance. A new system of gettering has recently been introduced, rendering it quiet and stable in operation. MH4 Catkin is noted for its non-microphonic properties.

Circuit.	Anode Volts.	Grid Bias.
L.G. Detector	50-200	Zero
A.B. Detector	100-200	-2 to -6
Amplifier	100-200	-1 to -3

Price 13/-

5 pin base. Overall Dimensions, 135×50 mm. Catkin, 112×33 mm.

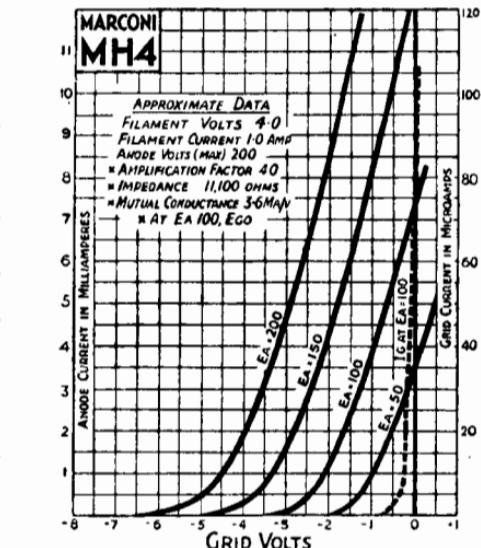
Marconi MH4I

High Slope Triode

MH4I is a high slope triode of remarkable efficiency. It has a maximum conductance of 6 mA/v., yet the electrode spacing is ample, and inter-electrode capacity is low. The heater embodies an entirely new technique, being a double helical non-inductive spiral, so eliminating the last traces of heater hum. MH4I is the best detector triode available.

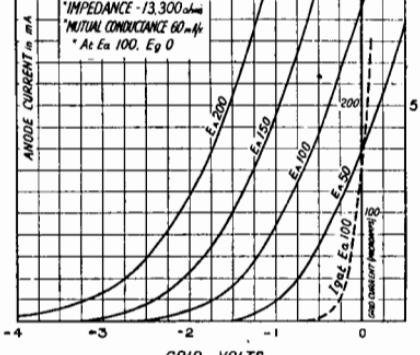
Circuit	Anode Volts	Grid Bias
L.G. Detector	80-200	Zero
A.B. Detector	100-200	-1½ to -3
Amplifier	100-200	-1 to -2

Price 13/-



MARCONI M.H. 4I

APPROXIMATE DATA
FILAMENT VOLTS 4.0
FILAMENT CURRENT 1.0 AMP
ANODE VOLTS 200_{max}
AMPLIFICATION FACTOR 80
IMPEDANCE 13.300 ohms
MUTUAL CONDUCTANCE 60 mA
* At Ea 100, Eg 0

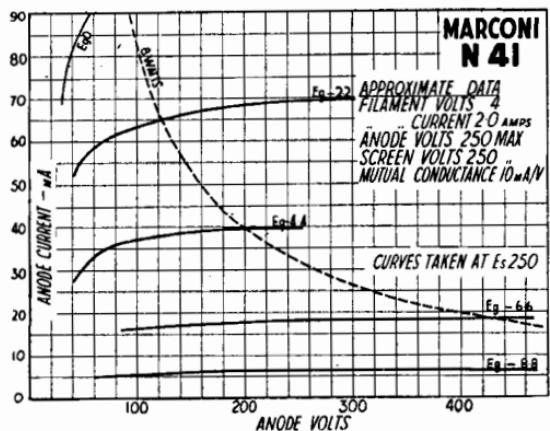


MARCONI ML4

ML4 is a low frequency amplifier and small output triode having a slope of 4.2 mA/v and M=12. It is also useful as a small power oscillator.

5 pin base. Overall Dimensions, 115×45 mm.

Price 14/-



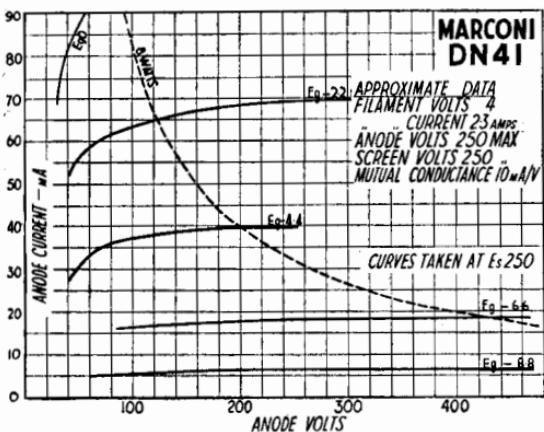
Marconi N41

Output Pentode

Here is highest efficiency allied with more than average output. N41 has a sensitivity of 250 mm. per volt squared input, and is the best output stage for sets having no L.F. amplification. It will follow a diode or other detector equally satisfactorily.

Price 18/-

7 pin base. Overall Dimensions, 140 x 56 mm. Optimum Load, 7,800 ohms.
Auto Bias Resistance, 90 ohms.



Marconi DN41

Double Diode Pentode

DN41 possesses the same high standard of performance as N41, but combines with this the addition of shielded diodes for detection and automatic gain control. A popular valve for the 3 valve superhet and other modern circuits.

Price 21/-

7 pin base. Overall Dimensions, 140 x 56 mm. Optimum load, 7,800 ohms
Auto Bias Resistance, 90 ohms.

MARCONI D41
Double Diode

A double diode having a 4-volt, 0.3 amp. heater, suitable for use with the A.C. or the Universal Range. 5 pin base.

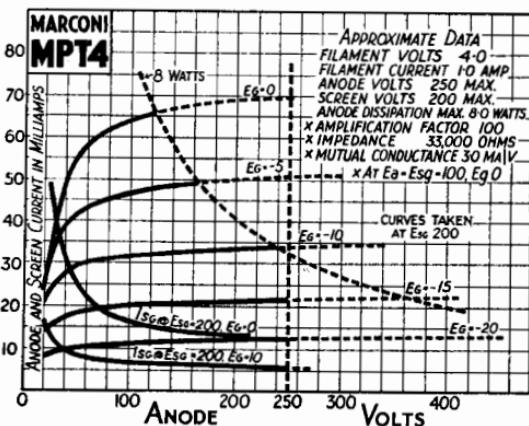
Price 5/-

Marconi

MPT4 Pentode

MPT4 is a standard power pentode, suitable for use in a large number of existing receivers and circuits. It will give sufficient output for normal home needs, with a reserve for peak passages. Recommended for use in three, four and five valve sets.

Optimum Load, 8,000 ohms.
Auto Bias Resistance,
280 ohms.



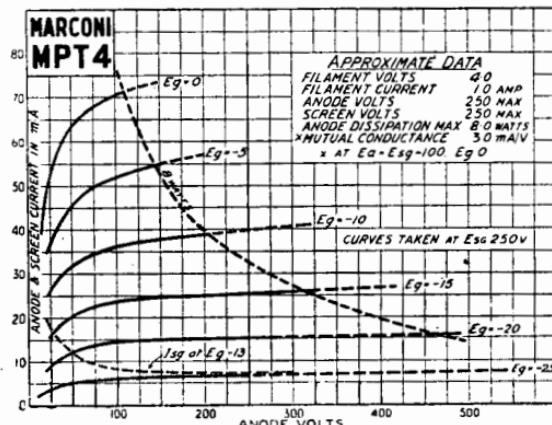
Price 18/6

7 pin base, or 5 pin with side terminal. Overall Dimensions, 140×60 mm.

Marconi

MPT4 Catkin

The output pentode has usually the heaviest task to perform, in that it operates at a greater anode voltage and current than previous valves. Here the Marconi Catkin MPT4 is at a considerable advantage, because its metal anode in direct contact with air ensures adequate dissipation of heat.



Price

18/6

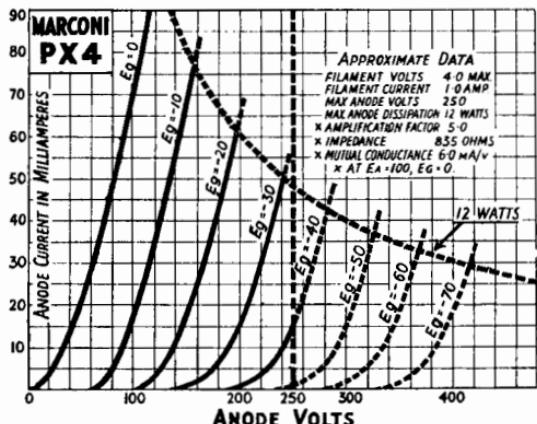
Optimum Load, 8,000 ohms. Auto Bias Resistance, 335 ohms.
5 or 7 pin base. Overall Dimensions, 112 × 33 mm.

MARCONI PT4

Directly Heated Pentode

An 8 watt directly heated pentode with general characteristics similar to those of MPT4/K.

Price 18/6



Marconi PX4

Triode

A pioneer of high slope triodes, PX4 is widely used for its sensitivity and large output — approximately 50% above that given by the average I.H.C. pentode. New improvements are again incorporated, an oxide coated filament and a stronger electrode system giving still greater reliability.

PX4 is ideal for home use, either as the last valve for the quality receiver, or in a gramophone amplifier.

Anode Volts	Grid Bias	Anode Current
150	-16	36
200	-26	40
250	-33	48

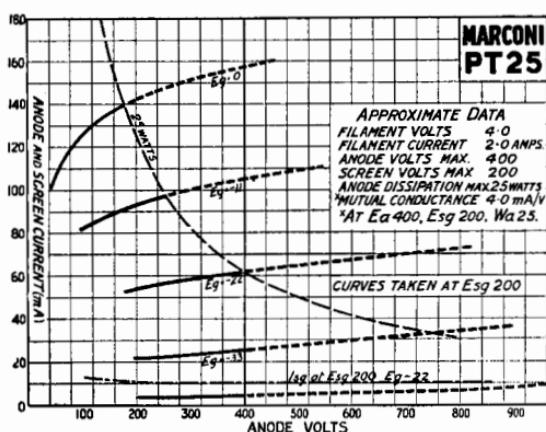
Price
16/-

Optimum Load, 3,200 ohms.

Auto Bias Resistance, 700 ohms.

4 pin base.

Overall Dimensions, 150 × 65 mm.



Marconi PT25

Pentode

PT25, with over 30% anode conversion efficiency, is recommended for all large receivers and power amplifiers where economy of space and equipment is called for. It is easily loaded from pickup or radio by one preceding stage, and the strong construction is of value in portable equipment.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
400	200	-22	52	10

Price
45/-

Optimum Load, 6,000 ohms.

Auto Bias Resistance, 350 ohms.

5 pin base.

Overall Dimensions, 165 × 70 mm.

Marconi PX25

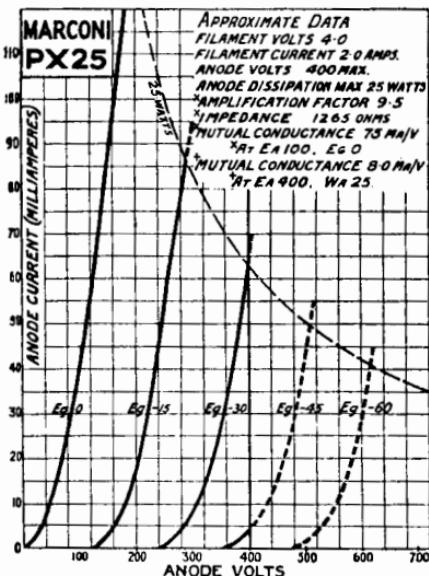
Triode

Steadily increasing in favour, PX25 is becoming a standard output valve for the large power receiver or amplifier. Widely used in push-pull, as its high slope means a moderate grid base and little difficulty in obtaining enough input from one preceding stage. The large well supported anode ensures cool operation and freedom from grid emission troubles.

Also a good small power transmitter on medium wavelengths.

Anode Volts	Grid Bias	Anode Current
400	-30	62.5

Optimum Load, 4,000 ohms.
Auto Bias Resistance, 475 ohms.



Overall
Dimensions,
165 x 70 mm.

Price **25/-**

Marconi PX25A

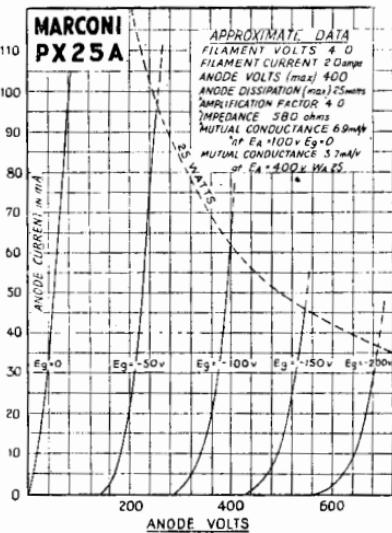
Triode

This low Impedance modification of PX25 will give approximately 60% greater output, and is particularly suitable for use in push-pull, where 2nd harmonic is cancelled in the output circuit.

In general, two stages of amplification will be necessary for use with pickup or sensitive microphone.

Anode Volts	Grid Bias	Anode Current
400	-103	62.5 m.a.

Optimum Load, 4,500 ohms.
Auto Bias Resistance, 1,630 ohms.

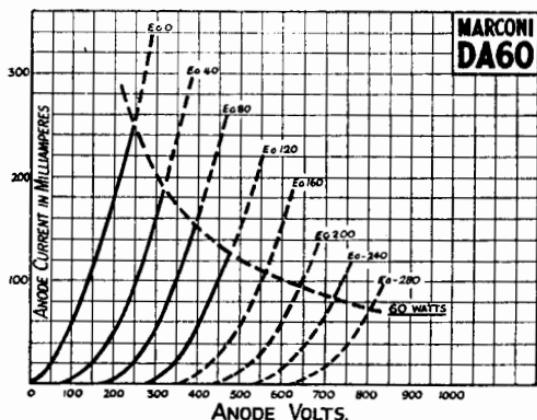


Overall
Dimensions,
165 x 70 mm.

Price **25/-**

Marconi DA6O

Power Output Triode



A directly heated High Power Output triode, with an anode dissipation of 60 watts and giving an undistorted output adequate for a large hall.

Filament Rating 6v at 4a.

Optimum Load 2,800 ohms.

Auto Bias Resistance, 1,100 ohms.

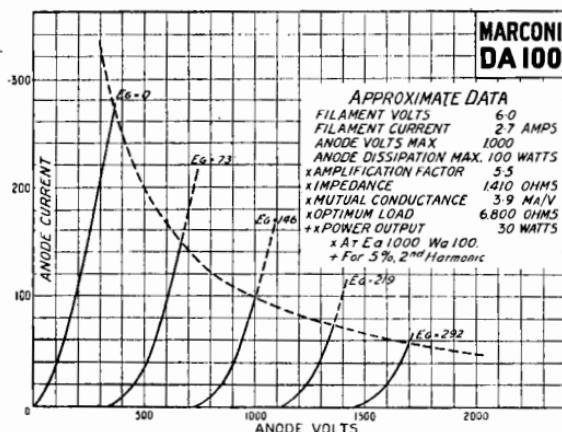
Special 4 pin base.

Price

110/-

Anode Volts	Grid Bias	Anode Current
300	-65	100 m.a.
400	-85	150 m.a.
500	-135	120 m.a.

Overall Dimensions, 205 x 78 mm.



Marconi DA100

Power Output Triode

A directly heated High Power Output triode, having an anode dissipation of 100 watts, and capable of an output of 30 watts.

Extensively used for Public Address and Programme Relay Purposes.

Optimum Load, 6,700 ohms.

Auto Bias Resistance, 1,500 ohms.

Special 4 pin Base.

Price

210/-

Anode Volts	Grid Bias	Anode Current
1,000	-146	100 m.a.

Overall Dimensions, 290 x 90 mm.

Marconi Universal Valves



Marconi W30
H.F. Pentode.



Marconi DH30
Double Diode
Triode

been introduced to render the range complete and adequate for modern needs. The triode hexode, particularly will be welcomed by the short wave listener, also the WD.30 and high slope output pentode N31.

Universal circuits often present difficulties, and we shall be glad to advise any who require information, and who write to the Valve Department.

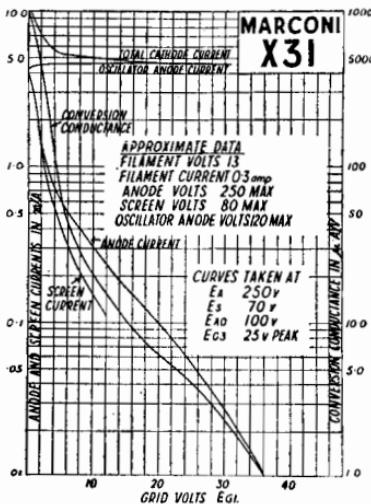
Over a year's experience with this range has fully justified the hopes with which it was introduced. The use of the specially developed 13 volt 0.3 amp. heater gives a high standard of performance comparable with

that of the A.C. types, together with robustness and reliability, whether on A.C., D.C., or under the difficult vibratory stresses of car radio.

New types have



Marconi N30
Pentode



Marconi X31

Triode Hexode

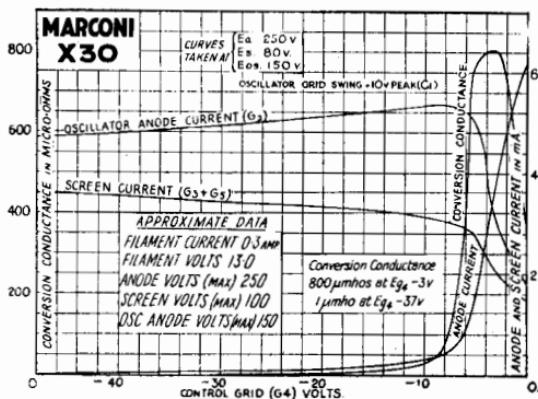
For the higher frequency bands, extending to 60 megacycles, this new frequency changer is the best of its kind, giving a substantial conversion efficiency with very little pulling or frequency drift with A.V.C. Circuit data on request.

Price 20/-

Anode Volts	Screen Volts	Oscill. Anode Volts	Grid Bias	Anode Current	Screen Current	Oscill. Anode Current	Conversion Conductance (Micromhos)
250	70	100	-1.5	1.8	1.7	4.5	550
250	70	100	-25	.05	—	4.6	3.5
250	70	100	-35	—	—	4.5	1.0

7 pin base.

Overall Dimensions, 130×45 mm.



Marconi X30 and X32

Heptodes

Marconi X30 is a Heptode frequency changer with a high conversion conductance. The tetrode section has a Variable Mu characteristic so proportioned that rapid gain control is obtained with freedom from cross modulation. X32 is identical in electrical characteristics, but has an extra shield for reducing modulation hum in difficult cases.

Anode Volts	Screen Volts	Oscill. Anode Volts	Grid Bias	Anode Current	Screen Current	Oscill. Anode Current
250	80	150	-3 -37	4 m.a. —	2 m.a. 3.5 m.a.	3 m.a. 4.8 m.a.

Price
20/-
each.

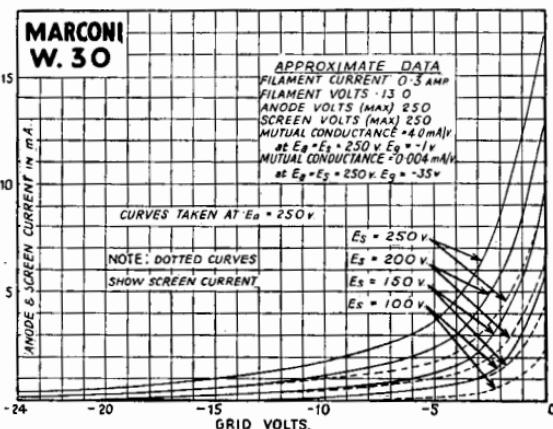
Overall Dimensions, 135×45 mm.

7 pin base.

Marconi W3O

Variable Mu H.F.
Pentode. Catkin.

A Variable Mu H.F. pentode with a high mutual conductance and low grid-anode capacity enabling high gain to be attained with stability.



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
250	250	-1 to -35V	12 m.a. max.	6 m.a. max.

Price
17/6

Overall Dimensions, 130×38 mm.

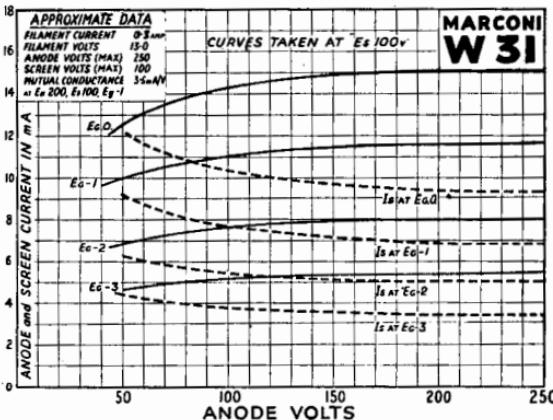
7 pin base.

Marconi W3 I

Variable Mu H.F.
Pentode

This valve has a high mutual conductance and short grid base and is particularly suitable as H.F. or I.F. amplifier in A.V.C. receivers.

It may also be used for high gain L.F. amplification.

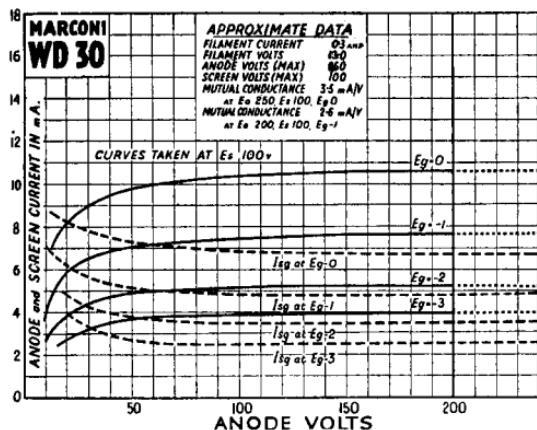


Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	100	-2 -20	8 m.a. 0.1 m.a.	5 m.a. —

Price
17/6

Overall Dimensions, 140×45 mm.

7 pin base.



Marconi WD30

H.F. Pentode—D Diode

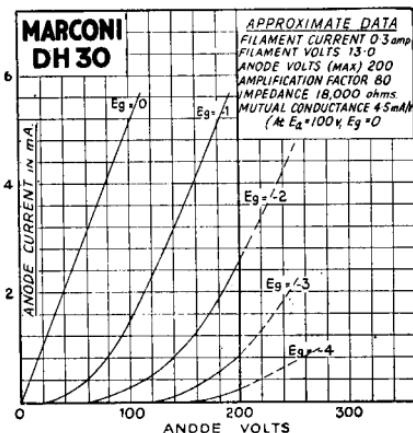
A new valve consisting of a screened pentode and double diode assembly in the same bulb. Designed for combined detection, A.V.C., and amplification at H.F. or L.F., or both if a reflex arrangement is employed.

Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	100	-1 -30	7.7 1.6	4.7 1.4

Price 20/-

9 pin base.

Overall Dimensions, 135 x 44 mm.



Marconi DH30

Double Diode Triode

A double diode triode valve comprising a double diode and a high slope triode assembly in one bulb.

Marconi DH30 may be used in straight or superheterodyne receivers as a half wave or full wave diode rectifier and L.F. amplifier; or as a half wave diode rectifier and L.F. amplifier with delayed, quiet or amplified A.V.C.

Anode Volts	Grid Bias	Anode Current
200	-2 volts	2.8 m.a.

7 pin
base.

Price 15/-

Overall Dimensions, 140 x 51 mm.

Marconi Universal N3O & N30G

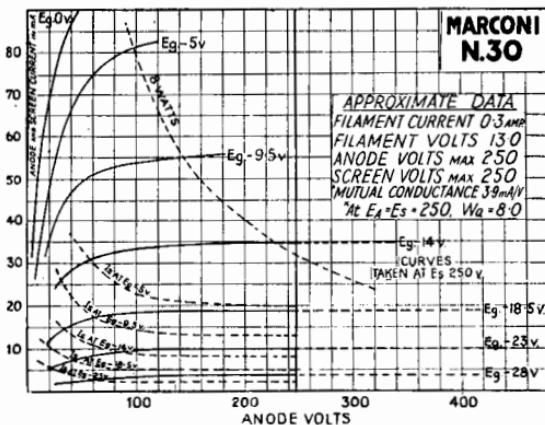
Output Pentodes
Catkin and Glass

Marconi N30 and N30G are highly sensitive output pentodes capable of a large undistorted output for a moderate input. The metal anode of N30 being in direct contact with air facilitates dissipation of heat.

Price **18/6**
each

Optimum Load, 7,500 ohms.

Auto Bias Resistance, 375 ohms.



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
250	250	-15 v	32 m.a.	7.5 m.a.
180	180	- 5 v	44 m.a.	10 m.a.

7 pin base.

Overall Dimensions, N30—120 × 35 mm.
N30G—135 × 56 mm.

Marconi N31

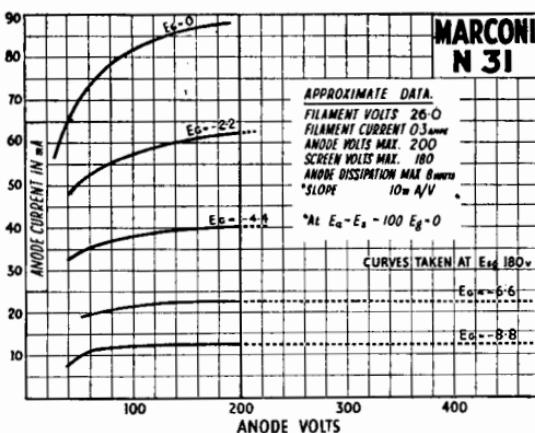
High Slope Pentode

The slope of this valve, 10 m.a. per volt, renders it so sensitive that it may be worked from a diode detector with no intermediate stage.

The control grid is taken to the top cap.

Optimum load, 5,500 ohms.

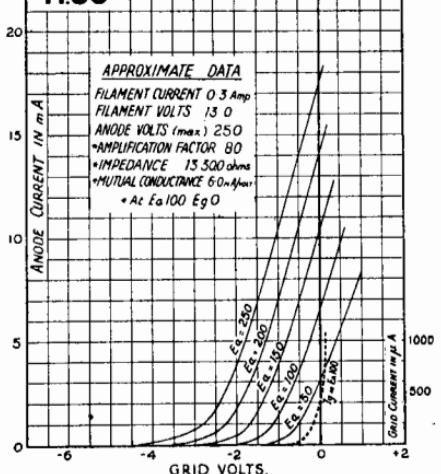
Auto Bias Resistance, 90 ohms.



Anode Volts	Screen Volts	Grid Bias	Anode Current	Screen Current
200	180	-4.4	40.0 m.a.	10.6 m.a.

Price **18/6**

MARCONI H.30



Circuit	Anode Volts	Grid Bias
Detector L.G.	50—200	Leak to Cathode
Detector A.B.	50—200	—1.5 to —4.5
Amplifier	150—200	—1.5 to —3

Marconi Universal H30

Triode

Marconi H30 is a high slope triode with the control grid connected to a metal top cap. This feature, in conjunction with the helical heater, ensures completely hum free operation of the H30 as a grid detector.

7 pin base.

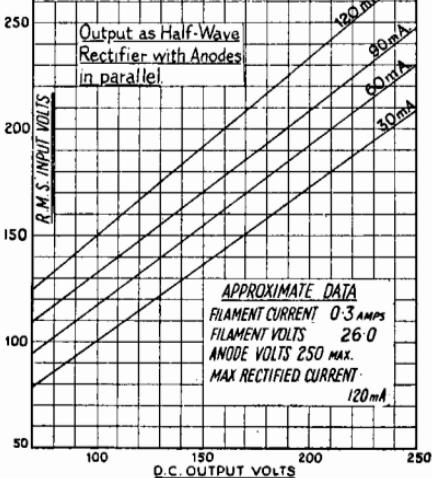
Overall Dimensions, 120 × 45 mm.



Price

13/-

MARCONI U.30



Marconi Universal U30

Rectifier

An indirectly heated rectifier with separate cathode connections taken out to two pins on the 7 pin base.

Marconi U30 may be used as a half-wave or full-wave rectifier or as a voltage doubler. When used in an A.C./D.C. receiver, the U30 functions as a half wave rectifier on A.C., and as a limiting resistance on D.C., dropping only 15 volts at a current of 100 m.A.

Overall
Dimensions,
132×50 mm.

Price 15/-

Marconi Rectifiers and Barretters



Marconi GUV1
Mercury Vapour
Rectifier.

Marconi Barretters are current regulators for the D.C. and "UNIVERSAL" ranges of valves. Their function is to maintain a constant current in the filament circuit, despite any reasonable variation in the voltage of the supply mains.

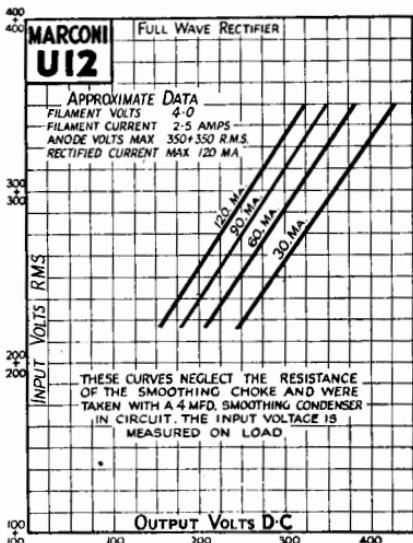
Two types are listed here, to cover all normal requirements, special cases being dealt with by the addition of fixed resistances.

THE rectifier has the unenviable distinction of being the hardest worked valve in the vast majority of receivers, and in accordance with tradition, it is usually the least considered.

This, certainly in the case of Marconi Rectifiers, may be due to the fact that their reliability induces users to "fit and forget." The robustness and uniformity of the U.12, for instance, is such that total troubles over the past 12 months do not reach $\frac{1}{2}$ per cent. of sales.



Marconi MUI2 & MUI4
Full Wave Indirectly
Heated Rectifiers



Overall Dimensions, 145×60 mm.

Marconi U12

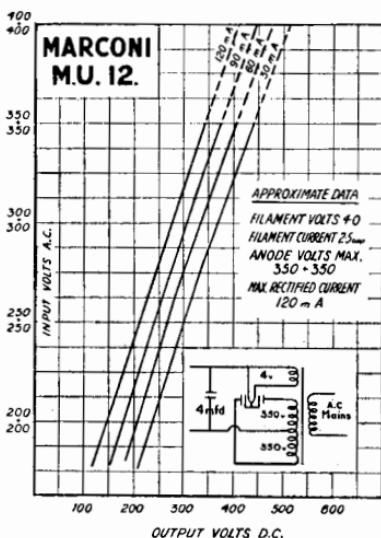
Full Wave Rectifier

Marconi U12 is a full wave rectifier most widely used in modern receivers, giving an output of 325 volts at 120 mA for an input of 350 volts R.M.S.

Price 15/-



Sturdy flat ribbon filaments, and a strongly braced mesh anode mean reliability.



Overall Dimensions, 145×60 mm.

Marconi MU12

Full Wave Rectifier

Marconi MU12 is the indirectly heated counterpart of the U12, giving a slightly greater output. A further advantage is that the slower heating time assists in preventing the setting up of high peak voltages when the receiver is switched on.

Price 15/-



Marconi MU12 will raise your H.T. voltage.

Marconi UI4

Full Wave Rectifier

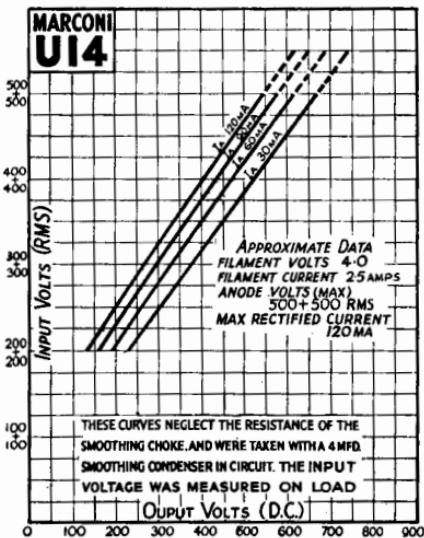
Marconi UI4 is a full wave rectifier for use in receivers employing valves such as the PX25, PT25, etc., in the output stage.

The UI4 will provide an output of 500 volts at a current of 120 m.A. for an input of 500 volts R.M.S.

Price 20/-



A valve for the
high power man.



Overall Dimensions. 145×60 mm.

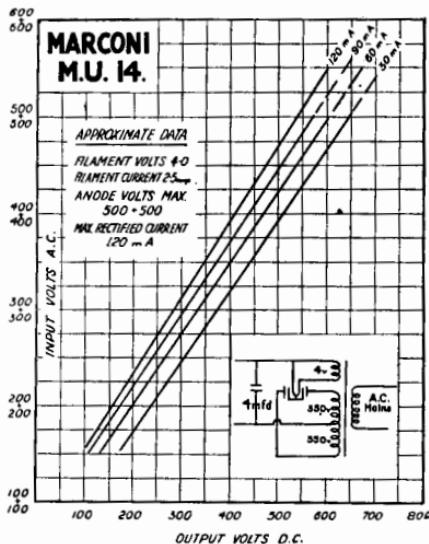
Marconi MUI4

Full Wave Rectifier

Marconi MU14 is an indirectly heated rectifier giving a slightly greater output than the UI4. The slower heating time avoids possible voltage rises when supplying a circuit fitted with I.H.C. valves. An output of 540 volts at 120 m.A. is obtainable for an input of 500 volts R.M.S.

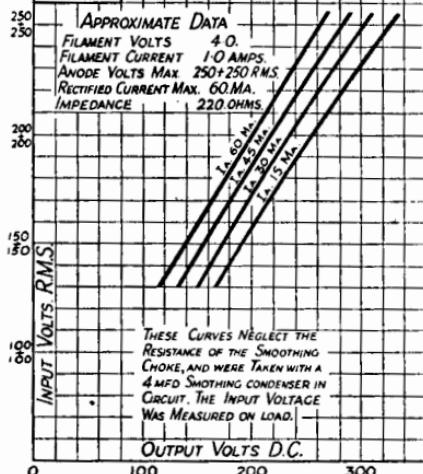
Construction is very rigid.

Price 20/-



Overall Dimensions, 145 x 60 mm.

MARCONI **UIO** **FULL WAVE RECTIFIER**



Marconi UIO

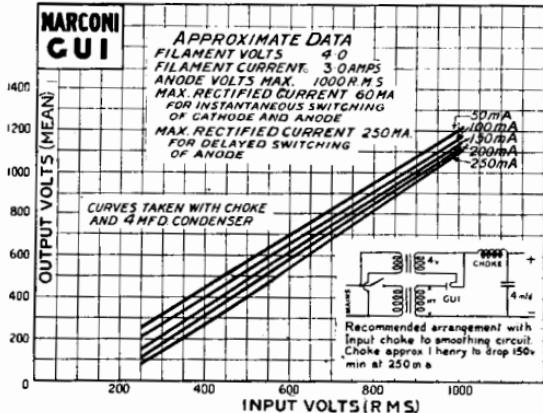
UIO is a full wave rectifier for small and medium size receivers and amplifiers. An economical and reliable valve incorporating the usual Marconi constructional features. With 250 volts R.M.S. input, at 60 m.A. output the H.T. voltage will be 260.

Overall Dimensions,
 135 x 55 mm.

Price 12/-



MARCONI **GUI**



Marconi GUI

GUI is a mercury rectifier for public address and other equipment operating at voltages up to 1000. Owing to the low internal resistance, the voltage drop in the valve is small, and high efficiency is obtained. The maximum current which may be drawn is 250 m.A., although when the filament and anode circuits are switched simultaneously, this is limited to 60 m.A.

GUI is also an excellent valve for high tension supply to amateur transmitting equipment, where economy and efficiency are important.

Overall Dimensions,
 115 x 45 mm.

Price 25/-

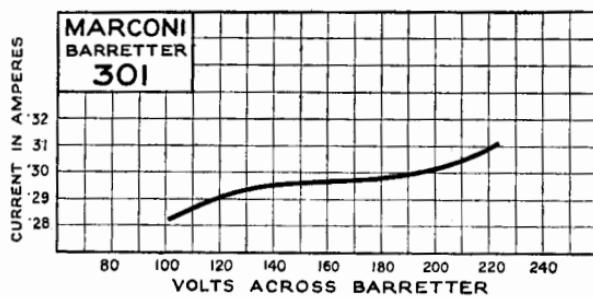


Marconi 301

Barretter

Current regulator which will limit the current to approximately 0.3 amp. in the heater circuit in spite of wide variations in the applied voltage.

For use with Marconi Universal valves.



Price 12/6

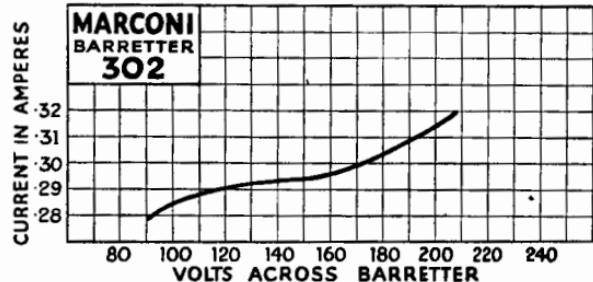


Edison Screw Cap Overall Dimensions, 145 × 60 mm.

Marconi 302

Barretter

For 6-7 valve receivers or where mains voltage is less than 230 this Barretter is recommended in place of 301.



Price 12/6



Edison Screw Cap. Overall dimensions, 145 × 60 mm.

Marconi DC., 4 volt and 6 volt Valves

Marconi 16 volt, 0.25 amp. D.C. Valves.

Type	Anode Volts max.	Screen Volts max.	Amplification	Slope	Price
DS	200	70	—	1.1	17/6
DSB	200	80	—	3.2	17/6
VDS	200	80	—	2.4	17/6
VDSB	200	80	—	3.0	17/6
DH	200	—	40	3.7	13/6
DHD	200	—	40	2.2	15/6
DL	200	—	12	4.5	14/-
DPT	200	200	—	3.0	18/6
251	Barret'r	—	—	—	12/6

Marconi 4 volt Battery Valves.

Type	Fil. Current	Anode Volts max.	Amplification	Slope	Price
S410	0.1	150	180	0.9	20/-
H410	0.1	150	40	0.66	12/6
HL410	0.1	150	25	0.83	12/6
L410	0.1	150	15	1.75	12/6
P410	0.1	150	7.5	1.5	13/6
P415	0.15	150	5.0	2.4	25/-
P425	0.25	150	4.5	1.95	13/6
PT425	0.25	200	100	2.0	17/6

Marconi 6 volt Battery Valves

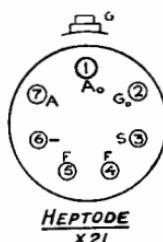
Type	Fil. Current	Anode Volts max.	Amplification	Slope	Price
S610	0.1	150	210	1.05	25/-
S625	0.25	180	110	0.63	25/-
H610	0.1	150	40	0.66	12/6
HL610	0.1	150	30	1.0	12/6
L610	0.1	150	15	2.0	12/6
P610	0.1	150	8	2.28	13/6
P625	0.25	250	6	2.5	20/-
P625A	0.25	200	3.7	2.3	20/-
PT625	0.25	250	80	1.85	25/-

Valve Base Diagrams

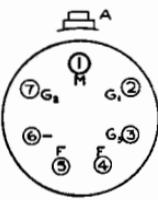
The advent of multiple valves has led to the introduction of new bases, so that we now have as standards four types, with four, five, seven and nine pins respectively. Additionally, there are side and top terminals.

The following diagrams will therefore be very useful to the constructor and experimenter, and are as complete as possible. They represent the view of the pins as seen when looking at the underside of the valve base.

Battery Types



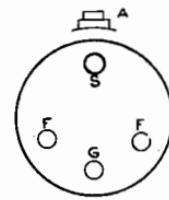
HEPTODE
X21



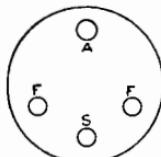
H.F. PENTODE
VP21



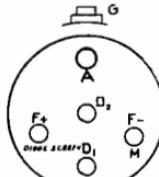
BATTERY
TRIODE PENTODE



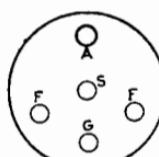
SCREEN GRID 523, 524
AND VAR MU SCREEN GRID VS24



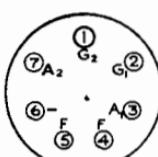
TRIODES HL2
L21, LP2, P2.



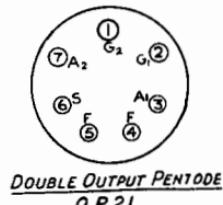
DOUBLE DIODE TRIODE
HD21



OUTPUT PENTODE
.PT2

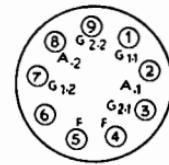


CLASS B OUTPUT
B21



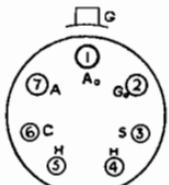
DOUBLE OUTPUT PENTODE
OP21

NOTE :
HD21 is not interchangeable with other makers valves.
For this purpose,
HD22, which has D₁ and D₂ reversed,
should be used.

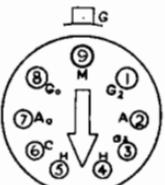


DOUBLE OUTPUT PENTODE
(9 PIN)

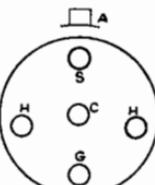
Valve Bases—Mains Valves



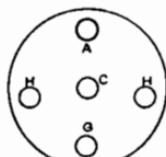
I.H. TRIODE HEXODES and
HEPTODES. X41, X31, MX40, X30, X32.



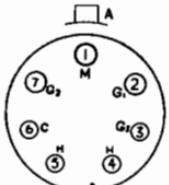
I.H. TRIODE PENTODE



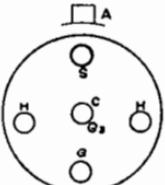
I.H. SCREEN GRIDS MS4, MS4B,
VMS4, VMS4B, DS, DSB, VDS, VDSB



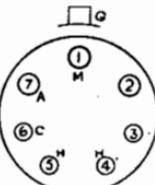
I.H. TRIDDES MH4, MH41,
MH14, MI4, DH, DL,



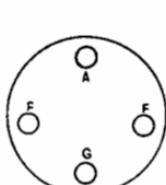
I.H. HF. PENTODES
VMP4 VMP4K, VMP4C W30, W31



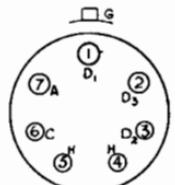
I.H. HF. PENTODES
MSP4 VMP4



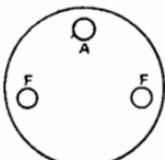
TRIODE UNIVERSAL RANGE
H.30



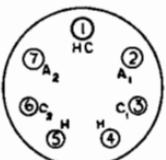
D.H. TRIODES
PX4, PX25 PX25A.



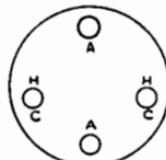
I.H. TRIPLE DIODE TRIODE



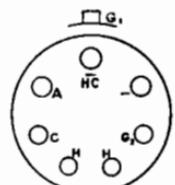
HALF WAVE RECTIFIER
GU.1



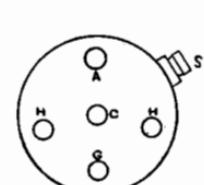
I.H. VOLTAGE DOUBLING
RECTIFIER U.30



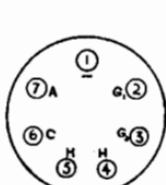
FULL WAVE RECTIFIERS
UI0, UI2, UI4, MUI2, MUI4



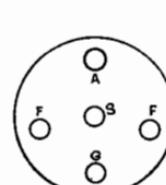
I.H. OUTPUT PENTODES
N 31



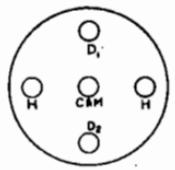
I.H. OUTPUT PENTODES
MPT4, DPT



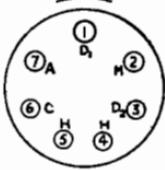
I.H. OUTPUT PENTODES
N41, MPT4, N30, DPT



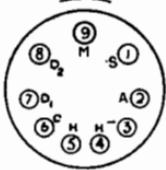
D.H. OUTPUT PENTODES
PT4, PT25, PT25H.



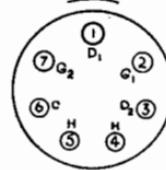
I.H. DOUBLE DIODES
D 41



I.H. DOUBLE DIODE TRIODES
MHD4, DHD, DH30



I.H. DOUBLE DIODE H.F.
PENTODES WD30, WD40

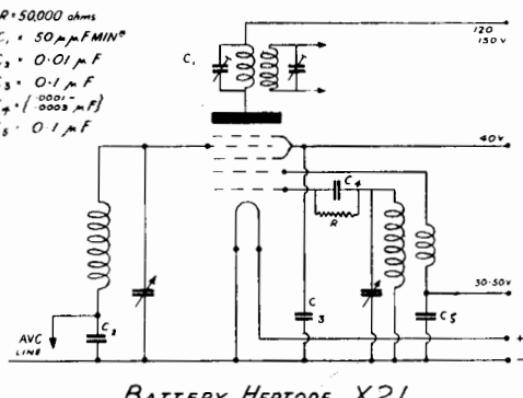


I.H. DOUBLE DIODE OUTPUT
PENTODES DN41

Circuit Diagrams

INTRODUCTION

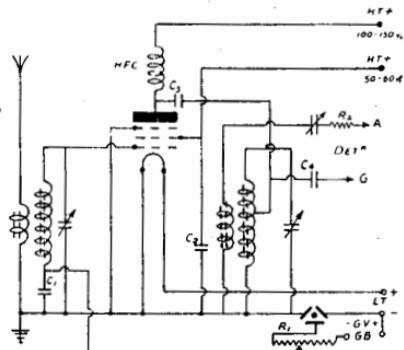
THE diagrams given in the following pages are intended as a guide to the enthusiast who prefers to design his own circuits or modifies published circuits to his personal tastes. They are not in any sense layouts, but give the best circuit arrangements, with component values as far as possible. A combination of diagrams may also be used to form a complete outline circuit for a set to meet almost any need, whether superhet or straight, and for mains or battery.



Here we have the new battery heptode, Marconi X21, in a suitable circuit. The optimum screen voltage is 40, no advantage being obtained by exceeding this value. The oscillator reaction coil should be about $\frac{1}{2}$ the tuned coil.

Circuit Diagrams

$C_1 = 0.1 \mu F$
 $C_2 = 1.0 \mu F$
 $C_3 = 0.0005 \mu F$
 $C_4 = 0.0001 \mu F$
 $R_1 = 50,000 \text{ ohms}$
 $R_2 = 500 \text{ ohms}$

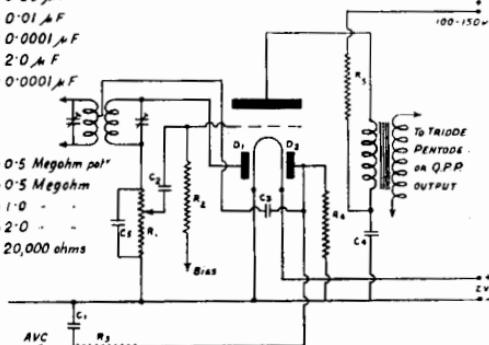


BATTERY HF PENTODE VP21

Marconi VP21, the battery H.F. pentode, has a high working impedance, and is here shown with iron core coils in a reaction circuit. Note the grid bias control. When A.V.C. is used, the bias lead goes through a 1 meg leak to the A.V.C. line (see next diagram).

$C_1 = 0.05 \mu F$
 $C_2 = 0.01 \mu F$
 $C_3 = 0.0001 \mu F$
 $C_4 = 2.0 \mu F$
 $C_5 = 0.0001 \mu F$

$R_1 = 0.5 \text{ Megohm pol'}$
 $R_2 = 0.5 \text{ Megohm}$
 $R_3 = 1.0$
 $R_4 = 2.0$
 $R_5 = 20,000 \text{ ohms}$

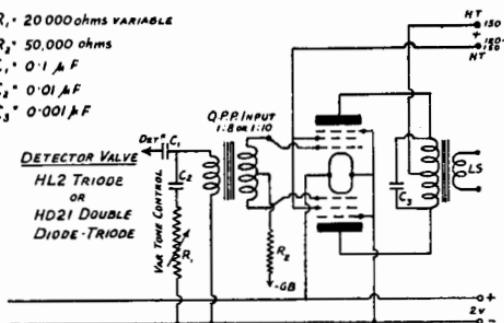


BATTERY DOUBLE DIODE TRIDOE HD22 AS
2nd DETECTOR, LF AMPLIFIER & DELAYED AVC

Marconi HD21 or HD22 is here used for detection and delayed A.V.C. It is very important that the diode (D_1) next to the negative end of the filament is used as the detector, and the other (D_2) for A.V.C. When wiring up, be sure to check this point carefully (see base connections on page 34).

Circuit Diagrams

R_1 = 20000 OHMS VARIABLE
 R_2 = 50,000 OHMS
 C_1 = 0.1 μ F
 C_2 = 0.01 μ F
 C_3 = 0.001 μ F

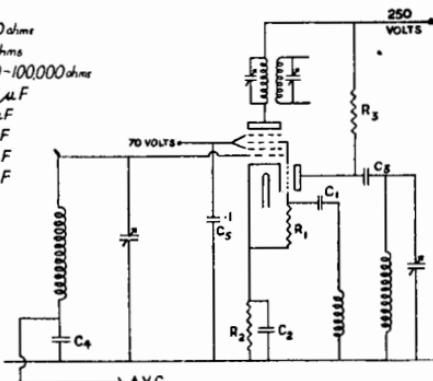


QP21 OUTPUT STAGE

The popularity of Marconi QP21, in its 'constant slope' circuit, is steadily advancing. For clean, definite reproduction it is undoubtedly the best battery set output stage when economy is essential. Note that no screen matching is required.

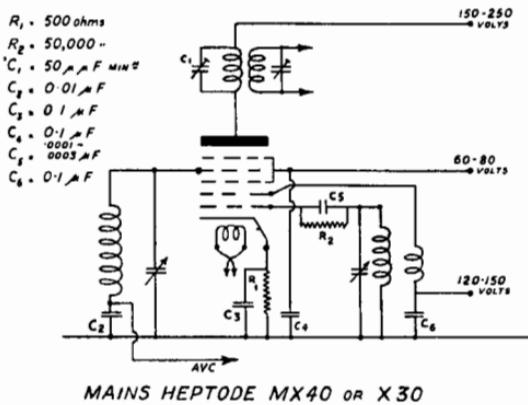
This circuit using the new triode hexode gives really satisfactory frequency changing on all wavebands. "Pulling" due to stray couplings inside the valve is negligible, even at the highest frequencies, and no chance should be given of external coupling spoiling this state of affairs. Signal and oscillator circuits should be very carefully screened.

R_1 = 50,000 ohms
 R_2 = 200 ohms
 R_3 = 50,000-100,000 ohms
 C_1 = 0.001 μ F
 C_2 = 0.1 μ F
 C_3 = 0.01 μ F
 C_4 = 0.1 μ F
 C_5 = 0.1 μ F

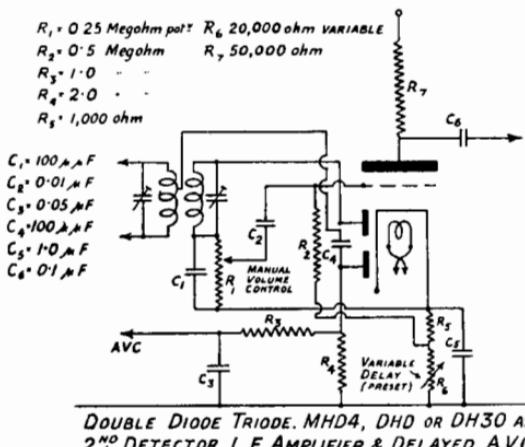


MAINS TRIODE HEXODE. X41. OR X31.

Circuit Diagrams



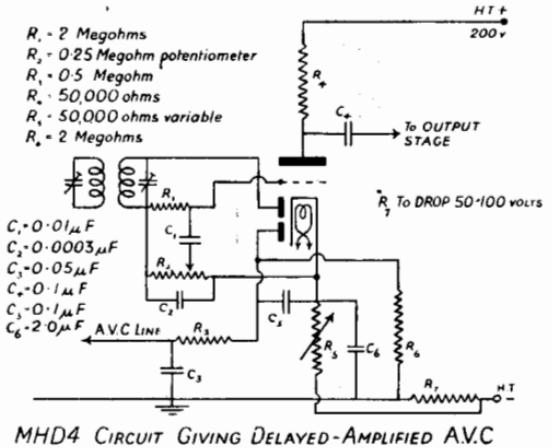
The frequency changer circuit. Here a useful point is that the reaction coil in the oscillator circuit should be $\frac{1}{2}$ to $\frac{1}{3}$ the tuned coil, and fairly tightly coupled. The screens, which require about 80 volts, may be fed from the same point as the screens of the H.F. and I.F. amplifier, as this tends to keep the voltage stable with changing bias.



This is the standard circuit arrangement for A.V.C. with simple receivers. Note that the A.V.C. is taken from the transformer primary, tapped to a suitable impedance. This minimises side band screech if the secondary winding is made to tune more sharply than the primary.

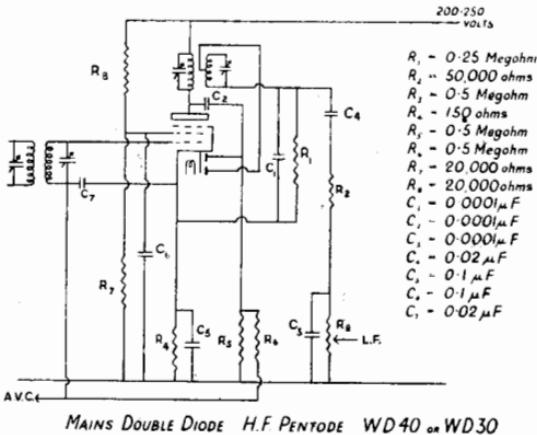
Circuit Diagrams

When A.V.C. is applied to one or two stages only, full control is best obtained by using amplified A.V.C., with a circuit of the type shown here. The triode portion of the M.H.D.4 amplifies the A.V.C. voltage as well as the L.F. signal. The exact value of R_7 depends on the total current taken by the receiver—it may sometimes consist of the speaker field. Adjustment of R_8 brings system to correct operating point.



MHD4 CIRCUIT GIVING DELAYED-AMPLIFIED A.V.C.

This is one of the many arrangements possible with Marconi WD30 and WD40. The pentode acting as I.F. amplifier is controlled by A.V.C. from one of the diodes. The other diode gives signal rectification. Delay is obtained from the drop across R_4 . Very good A.V.C. results in circuits where the L.F. from R_3 is fed direct to an output pentode such as Marconi N41.



Marconi Equivalents

BATTERY RANGE

MARCONI	Cossor	Ferranti	Mazda	Mullard	Brimar	Ever Ready
X21	210PG	VHT2	—	FC2	—	K80A
S23	215SG	—	SG215	PM12	5BI	—
S24	220SG	—	S215B	PM12A	—	—
VS2	220VSG	—	—	PM12V	—	—
VS24	220VS	VS2	S215VM	PM12M	—	K40N
VP21	210VPT	—	VP215	VP2	—	K50M
HD22	—	H2D	HL21DD	TDD2A	—	K23B
H2	210RC	—	H2	PM1A	—	—
HL2	210HL	—	HL2	PM1HL	HLBI	K30C
HL210	210HF	—	HL210	PM1HF	—	—
L21	210LF	—	L2	PM2DX	—	K30D
LP2	220PA	L2	P220	PM2A	PBI	K30E
P215	220P	—	P215	PM2	—	—
P2	230XP	—	P220A	PM202	—	—
PT2	220HPT	—	Pen 220	PM22A	Pen.BI	K70B
B21	220B	HP2	PD220A	PM2BA	—	—
QP21	—	—	—	QP22A	—	K77A

AC MAINS RANGE

MX40	41MPG	VHT4	—	FC4	—	A80A
MS4	MSG/LA	—	—	S4V	—	—
MS4B	41MSG	—	AC/SG	S4VB	SGAI	—
MSP4	MS/Pen.A	SPT4	AC/S2 Pen.	SP4	8AI	A50A
VMS4	MVSG	VS4	AC/SG.VM	MM4V	VSGAI	—
VMS4B	—	—	AC/2SG.VM	—	—	—
VMP4	MVS/Pen.	VPT4	AC/VPI	VP4	9AI	A50N
MHD4	DDT	H4D	AC/HL.DD	TDD4	11A2	A23A
MH41	41MH	—	AC/2HL	904V	HLA1	A80B
MH4	41MFH	D4	AC/HL	354V	HLA2	A30D
MHL4	41MLF	—	—	164V	—	—
ML4	41MP	—	ACP	104V	PA1	—
MPT4	MP/Pen.A	—	AC/Pen.	Pen.4VA	7A2	—
PT4	PT41	—	—	PM24M	Pen.AI	—
N41	42MP/Pen.	PT4	AC2/Pen.	Pen.4VB	—	A70C
DN41	—	PT4D	AC2/PenDD	—	—	—
D41	DD4	SD	V914	2D4A	—	A20B
PX4	4XP	LP4	PP3/250	ACO44	—	S30C
PX25	—	—	PP5/400	DO24	—	—
PX25A	—	—	—	DO26	—	—
PT25	—	—	—	PM24D	—	—

RECTIFYING VALVES

UI0	506BU	—	UU4	DW2	R1	—
UI2	442BU	R4	UU120/350	DW3	—	—
MUI2	—	—	—	IW3	R2	AIIB
UI4	460BU	R4A	UU120/500	DW4	—	—
MUI4	—	—	—	IW4	R3	—
GUI	—	—	MUI	—	—	—

Here are the Marconi Valves for your Set

Receiver	MARCONI VALVES							
	V1	V2	V3	V4	V5	V6	V7	V8
Aerodyne								
Var. Mu Battery SG3 ...	VS24	HL2	P2	—	—	—	—	—
A.C. Raven ...	HL2	L210	LP2	—	—	—	—	—
A.C. 2 ...	MH4	MPT4	—	—	—	—	—	—
D.C. 2 ...	DH	DPT	—	—	—	—	—	—
A.C. Robin ...	MSP4	N41	MUI12	—	—	—	—	—
" Drake ...	VMP4	MSP4	MPT4	U12	—	—	—	—
" Swallow ...	MX40	VMP4	MH4D	MPT4	MUI14	—	—	—
Table Radio-Gram.	VMS4	MH4	MPT4	—	—	—	—	—
Swan ...	VMP4	MH4	MPT4	—	—	—	—	—
Alba								
Batt. 21 ...	—	HL2	PT2	—	—	—	—	—
" 22 ...	S24*	HL2*	PT2	—	—	—	—	—
" 33 ...	S24*	HL2*	PT2	—	—	—	—	—
" 34 Superhet	PT2	VS24*	HL2*	L21	—	—	—	—
" 34 Radio-Gram ...	—	HL2	PT2	—	—	—	—	—
A.C. 50 ...	VMS4	MS4B	PT4	U10	—	—	—	—
" 52 ...	VMP4*	MSP4*	PT4	U12	—	—	—	—
" 54 Superhet	MSP4	VMP4	MS4B*	PT4	MUI12	—	—	—
" 55 ...	MS4B	MH4	MPT4	U10	—	—	—	—
" 56 Superhet	MS4P	VMP4	MS4B*	PT4	MUI12	—	—	—
" 57 ...	VMP4*	MX40*	VMP4*	—	MPT4	MUI12	—	—
" 60 ...	MS4B	MH4	MPT4	U10	—	—	—	—
" 68 ...	VMP4*	MX40*	VMP4*	—	MPT4	MUI12	—	—
" 67 Superhet	MSP4	VMP4	MS4B*	PT4	MUI12	—	—	—
Radio-Gram	VMS4	MS4B*	PT4	U10	—	—	—	—
" 72 ...	VMP4*	MSP4	PT4	U12	—	—	—	—
" 78 ...	MSP4	VMP4	MS4B*	PT4	MUI12	—	—	—
D.C. 55 ...	DSB	DH	DPT	—	—	—	—	—
" 66 ...	DSB	DH	DPT	—	—	—	—	—
" 77 ...	DSB	DH	DPT	—	—	—	—	—
" 88 ...	DSB	DH	DPT	—	—	—	—	—
Beethoven								
Batt. 53 ...	—	HL2	PT2	—	—	—	—	—
54 ...	—	HL2	HL2	PT2	—	—	—	—
S.G. Portable 4 ...	S23*	HL2*	L21	LP2	—	—	—	—
" Transportable 4 ...	S23*	HL2*	HL2*	PT2	—	—	—	—
" Major ...	S23*	HL2*	HL2*	PT2	—	—	—	—
Batt. 85 Portable ...	VS24	HL2	HL2	PT2	—	—	—	—
" 75 ...	VS24	HL2	HL2	P215	—	—	—	—
A.C.3 (1933) ...	MS4B	MS4	MPT4	U10	MPT4	MUI12	—	—
A.C. 56 ...	VMP4	MX40	VMP4	—	—	—	—	—
Burgoyne								
2 Pentode 3 Batt. ...	—	HL2	PT2	—	—	—	—	—
Class "B" 3 ...	HL2*	L21*	B21	—	—	—	—	—
Dreadnought Batt. 3 ...	S24*	HL210*	PT2	—	—	—	—	—
Olympic Batt. 3 (1935)	HL210	L210	LP2	—	—	—	—	—
Olympic-de-luxe	H2	L210	PT2	—	—	—	—	—
Clock Batt. 3 ...	HL210	L210	P215	—	—	—	—	—
Popular Batt. 3 ...	HL210	HL210	P215	—	—	—	—	—
Model "A" ...	HL210	HL210	HL210	P215	HL210	P215	—	—
Portable 5 ...	HL210	HL210	HL210	HL210	—	P215	—	—
Class 'B' 3 de-lux Batt.	HL2*	L21*	B21	—	—	—	—	—
Pentode Portable ...	HL210	HL210	HL210	L210	PT2	—	—	—
Screen Grid 4 ...	S23	HL210	HL210	PT2	—	—	—	—
5-valve Superhet Batt.	—	—	HL2*	L21	B21	—	—	—
A.C. Silver 7 Superhet	MS4	MS4	MH4	PX4	U12	—	—	—
Burndep								
Batt. 3 ...	HL2	HL2	P2	—	—	—	—	—
Screened Etho.	S24	HL2	PT2	—	—	—	—	—
Ethogram ...	S24	HL2	HL210	P2	—	—	—	—
A.C. 209 ...	VMP4*	MX40	VMP4*	—	N41	U12	—	—
" 214 ...	VMP4*	MX40*	VMP4*	—	MH4*	PX4	U14	—
A.C. Ethophone ...	MS4B	MH4	MPT4	U10	—	—	—	—

Receiver	MARCONI VALVES							
	V1	V2	V3	V4	V5	V6	V7	V8
Bush								
Q.P.P.5	S23*	HL2*	L21	PT2	PT2	—	—	—
S.B. 1 Superhet	VP21*	VP21*	PT2	HD22	PT2	—	—	—
Batt. SB4	X21	—	—	PT2	—	—	—	—
S.B.21	X21	—	—	PT2	—	—	—	—
A.C. S.A.C. 5	MX40	VMP4	MH4	MPT4	—	—	—	—
" S.A.C. 1	MX40	VMP4	DN41	—	—	—	—	—
" S.A.C. 7	VMP4	MX40	VMP4	MH41	MPT4	—	—	—
A.C. 3	MS4B	MS4B	MPT4	U12	—	—	—	—
S.A.C. 4 Superhet	MSP4	VMP4	MH4*	PT4	—	—	—	—
S.A.C. 6	MS4B*	MSP4	VMP4	MH4*	PT4	—	—	—
A.C. S.A.C. 21	MX40	VMP4	D41	N41	MUI12	—	—	—
A.C. S.A.C. 25	MX40	VMP4	MHD4	PX4	MUI12	—	—	—
A.C. Upright Grands	MX40	VMP4	DN41	MUI12	—	—	—	—
Radio-Gram	MS4B*	MS4B*	PT4	UI2	—	—	—	—
Clarke's Atlas								
A.C. A.7-5-8	MX40	VMP4	MHD4	PX4	MUI12	—	—	—
R.A. 2	MH4	ML4	—	—	—	—	—	—
Columbia								
303 CD	HL210	HL210	H2	L210	P215	—	—	—
304 A.C. I.D.H.	MS4*	MS4*	MS4*	ML4	PX4	U10	—	—
304 Batt.	S23	S24	S24	L210	P2	—	—	—
306 "	S23	HL2	HL2	P215	—	—	—	—
309	HL210	PT2	—	—	—	—	—	—
333 A.C.	MS4	MS4	MS4	ML4	PX4	U10	—	—
351 Batt.	HL2*	LP2	—	—	—	—	—	—
352 A.C.	MS4B*	MS4B*	MH4*	MPT4	UI2	—	—	—
353 Batt.	HL2*	LP2	—	—	—	—	—	—
354	S23*	HL2*	PT2	—	—	—	—	—
355 A.C.	MS4B	MH4	MPT4	U12	—	—	—	—
355 D.C.	DSB	DH	DPT	—	—	—	—	—
356 A.C.	VMS4*	MH4*	MS4*	VMS4*	MH4	PX4	U12	DPT
356 D.C.	VDS*	DH*	DS*	VDS*	DH*	DPT	PT2	—
380 Batt.	S23*	HL2*	S23*	S23*	HL2*	—	—	—
604 A.C.	MS4B*	MS4B*	MPT4	U12	—	—	—	—
620 A.C.	MS4B*	MH4	MPT4	U12	—	—	—	—
630 D.C.	DSB	DH	DPT	—	—	—	—	—
640 B.	VMS4*	MHL4	MS4*	VMS4*	VMS4*	MHL4*	ML4	PX4
640 C.	VMS4B*	MHL4	VMS4B*	VMS4B*	MS4B*	V9	V10	U14
357 A.C.	—	—	—	—	—	—	—	—
358 A.C.	MX40	VMS4*	MHD4*	MPT4	MUI12	—	—	—
621 A.C. R.G.	—	—	—	—	—	—	—	—
1001 Batt.	VS2*	HL2*	PT2	PT2	—	—	—	—
1003 "	VS2*	HL2*	PT2	PT2	—	—	—	—
1005 "	S23*	HL2*	PT2	—	—	—	—	—
1006 "	VS2*	S23	VS24*	HD21	QP21	—	—	—
Cossor								
3456 Batt.	VS24	HL2	LP2	—	—	—	—	—
350	VS24	L21	P215	—	—	—	—	—
353 " Super F'dyne	VS24	VP21	PT2	—	—	—	—	—
355 " Console	VS24	CP21	PT2	—	—	—	—	—
3455 "	VS24	VP21	PT2	—	—	—	—	—
435B "	VS24	VP21	P215	—	—	—	—	—
732 "	VS2*	VS2*	HL2*	P215 or PT2	—	—	—	—
732M "	VS2*	VS2*	HL2*	PT2	—	—	—	—
735 "	VS24*	VS24*	HL2*	L21	—	—	—	—
634 "	PT2	VS24*	HL2*	L21	—	—	—	—
233 A.C.	MHL24*	ML4	U12	—	—	—	—	—
3467 A.C.	VMS4*	MH41*	ML4	U12	—	—	—	—
3468 "	VMS4*	MH41*	ML4	U12	—	—	—	—
358 "	VMS4	MSP4	ML4	U12	—	—	—	—
435 "	VMS4	MSP4	MPT4	U12	—	—	—	—
356 "	VMS4	MSP4	PT4	U12	—	—	—	—
536 " R.G.	VMS4*	MSP4*	PT4	U12	—	—	—	—
533A "	VMS4*	VMS4*	MH41*	N41	U12	—	—	—

Receiver	MARCONI VALVES							
	V1	V2	V3	V4	V5	V6	V7	V8
Cossor (cont.)								
635 A.C.	VMP4*	MH41	VMP4*	MS4B*	MPT4	UI2	—	—
535 "	MX40	VMP4	—	N41	U12	—	—	—
3469 D.C.	VDS*	DH*	DPT	—	—	—	—	—
Eko Radio								
B85 Batt.	—	VP21	HD22	QP21	—	—	—	—
B74	S23	VS24	HL210	L21	—	—	—	—
B74 "	S23	VS24*	HL2*	L21	—	—	—	—
M23	MS4	MH4	PT4	—	—	—	—	—
A.C.74	MSP4	VMP4*	MHD4*	MPT4	MUI2	—	—	—
85 A.C.	MX40	VMP4	—	MH4	MPT4	MUI2	—	—
84 " R.G.	MSP4	VMP4	MHD4	MPT4	MUI2	—	—	—
S.H.25	MS4B	MH4	VMS4	MH4	PT4	—	—	—
Ever Ready								
Batt. 5001	VS24*	X21*	—	L21	—	—	—	—
5007	X21*	VP21*	HD22*	QP21	—	—	—	—
A.C. 5002	—	VMP4*	DN41	MUI2	—	—	—	—
" 5003	MX40*	VMP4*	MHD4*	PX4	MUI2	—	—	—
" 5004 }	MX40*	VMP4*	D41	N41	MUI2	—	—	—
" 5006 }	MX40*	VMP4*	—	—	—	—	—	—
Ferranti								
Mercia	—	VS2*	S24*	LP2	—	—	—	—
Consolette Batt.	X21	VS24	HD22	LP2	—	—	—	—
Consolette Portable	VS24	X21	VS24	HD22	LP2	—	—	—
Lancastria	MX40*	VMP4*	MHD4*	PX4	U12	—	—	—
Gloria	VMP4*	VMP4*	MH4*	VMP4*	MHD4*	PX4	U12	—
Gloria Consolette A.C.	VMP4	MX40	VMP4	MHD4	PX4	MH4	U12	—
Gloria R.G.	MX40	VMP4	MHD4	MHL4	PX4	PX4	U12	—
Lancastria Cons'tte "	MX40	VMP4	N41	U12	—	—	—	—
Nova Consolette	MX40	VMP4	DN41	U12	—	—	—	—
Una Consolette	VMP4	MH4	N41	U12	—	—	—	—
Arcadia Console	MX40	VMP4	MHD4	PX4	U12	—	—	—
Arcadia Consolette	MX40	VMP4	MHD4	PX4	U12	—	—	—
R.G.	MX40	VMP4	MHD4	PX4	U12	—	—	—
Lancastria A.C./D.C.	X30	W30	DH30	N30	U30	—	—	—
Una A.C./D.C.	W31	H30	N31	U30	—	—	—	—
Nova A.C./D.C.	X30	W31	D41	N31	U30	—	—	—
G.E.C.								
M.C.3	HL2	HL2	P2	—	—	—	—	—
2v. B.C. 2850	HL2	LP2	—	—	—	—	—	—
3v. B.C. 2830	HL2	L210	P2	—	—	—	—	—
S.G.3 B.C. 3032	S24*	HL2*	LP2	—	—	—	—	—
S.G. Portable	S23*	HL210	L210	P215	—	—	—	—
All Wave Super	S23	HL2	S23	S23	HL2	P2	—	—
Compact 3 Batt.	HL2	HL2	P2	—	—	—	—	—
CB4	VS24	VP21	L21	B21	—	—	—	—
Batt. S.G.3	VS24*	VP21	PT2	—	—	—	—	—
Batt. A.V.C. 6	VS24*	X21	VS24*	HD22	L21	B21	—	—
Gala B.C. 3335	MS4B	MS4B	PT4	U14	—	—	—	—
Carnival B.C. 3338	MS4B	MS4B	PT4	U14	—	—	—	—
Superhet—5	MS4B	VMS4*	MS4B*	MPT4	U12	—	—	—
Superhet A.V.C.5 A.C.	X30	W30	DN30	N30	MU14	—	—	—
R.G.	X30	W30	DN30	N30	MU14	—	—	—
Overseas 7	VMP4	VMP4	VMP4	ML4	MHD4	MPT4	U12	—
Superhet—6	S24*	VS24*	HL2*	L21	L21	B21	Catkin	—
Catkin	Catkin	Catkin	—	—	—	—	—	—
Superhet—8	VMS4	MH4	VMS4	VMP4*	MHD4*	MHL4	U14	—
Droitwich Super 5	MX40	VMP4/K	MHD4	MPT4/K	U12	—	—	—
Shadowband R.G. 5 }	—	—	—	—	—	—	—	—
Superhet A.C.4	MX40*	VMP4G	DN41	U12	—	—	—	—
Superhet 5 D.C.	DSB	DSB	VDS	DPT	251 Barr	letter	—	—
3-valve A.C./D.C.	H30	N30	U30	—	—	—	—	—
Car Radio	W30	X30	W30	DH30	N30	—	—	—
H.M.V.								
I48 Batt.	S23*	HL2*	PT2	—	—	—	—	—
I46 "	X21	VS24*	HD21	QP21	—	—	—	—

Receiver	MARCONI VALVES							
	V1	V2	V3	V4	V5	V6	V7	V8
H.M.V. (cont.)								
462 Batt.	... ...	S23*	S23	VS2*	HL2	PT2	PT2	—
435	... ...	MS4B*	MH4	MPT4	UI0	—	—	—
436	... ...	MS4B*	MH4	MPT4	UI2	—	—	—
438	... ...	MS4B*	VMS4*	MH4*	MPT4	UI2	—	—
439	... ...	MS4B	VMS4*	MH4*	MPT4	UI2	—	—
442	... ...	MX40	VMS4B*	MHD4*	PX4	UI2	—	—
459 M.C.	... ...	S23*	HL2*	S23*	S23*	HL2*	PT2	—
463	... ...	VM54*	MS4B	VMS4B*	MHD4*	MPT4	UI2	—
467	... ...	VMS4B*	MH4*	MS4B*	VMS4B*	MH4*	PX4	UI2
470	... ...	VMS4*	MH4*	MS4*	VMS4*	MH4*	PX4	UI2
523	... ...	VMS4*	MH4*	MS4*	VMS4*	MH4*	PX4	UI2
524	... ...	VMS4B*	MH4*	MS4B*	VMS4B*	MH4*	PX4	UI2
440 A.C.	... ...	MS4B	VMS4*	MH4*	MPT4	UI2	—	—
570	... ...	MX40	VMS4B*	MHD4*	PX4	UI2	—	—
540 }	... ...	MS4B	VMS4*	MH4*	MPT4	UI2	—	—
540d								
541	A.C.	... ...	MX40	VMS4*	MHD4*	MPT4	MUI2	—
441								
532a	... ...	VMS4*	MHL4	MS4*	VMS4*	VMS4*	MHL4	ML4
					V9	—PX4	V10	PX4
532b	... *	VMS4B*	MHL4	VMS4B*	VMS4B*	MS4B*	MH4*	ML4
					V9	—PX4	V10	PX4
580 A.C.	... ...	VMS4B*	MX40*	VMS4*	MS4B*	MHD4*	MHD4*	MU12
600 "	... ...	VM54B	MH4(2)	MSP4*	MS4B*	MHD4	MHD4*	PX4 (2)
			(3) Cat.		(2)	(2)	VMP4*	PX25 (2)
A.C./D.C. 340 }	... ...	X30*	WD30*	N30G	U30	—	—	—
A.C./D.C. 341 }	... ...						
Kolster Brandes								
102	... ...	S24	HL210	PT2	—	—	—	—
163	... ...	S23	HL210	PT2	—	—	—	—
281	... ...	S24	HL2*	PT2	—	—	—	—
310	... ...	S23	HL2*	PT2	—	—	—	—
333A	... ...	VS24*	S23*	PT2	—	—	—	—
103	... ...	S23	H2	HL2	P215	—	—	—
156	Batt.	... ...	S23	H2	HL2	P215	—	—
New Pup "	... ...	HL2	HL2*	PT2	—	—	—	—
393	"	S23*	HL24	PT2	—	—	—	—
337	"	S23*	HL2	HL2	PT2	—	—	—
364	"	S23	VS24	PT2	—	—	—	—
396	"	S23*	HL2	LP2	—	—	—	—
363	"	VS24	HL2	LP2	—	—	—	—
322	Pup A.C.2 (298)	... ...	MH41*	MPT4	UI0	—	—	—
397 A.C.	... ...	MH4	ML4	UI0	—	—	—	—
402	" R.G. }	MSP4	MSP4	MPT4	UI2	—	—	—
365	" R.G. }	VMP4	MSP4	VMP4	MHD4	MPT4	UI2	—
378	" R.G. }	VMP4	MSP4	VMP4	MHD4	—	MPT4	MPT4
366	" R.G. ...	VMP4	MSP4	VMP4	MHD4	—	MPT4	UI4
357 S.W. Converter	... ...	MSP4	—	—	—	—	—	—
279	Kobra A.C.3 (305)	MS4B*	MH4*	PT4	UI2	—	—	—
321	... ...	MH41*	MH4*	ML4	UI0	—	—	—
330	... ...	MS4B*	MH41*	PT4	UI2	—	—	—
320	... ...	VMS4*	MH41*	PT4	UI2	—	—	—
444	... ...	VMS4*	VMS4*	MH41*	PT4	UI2	—	—
666	... ...	MSP4*	MSP4*	MPT4	UI2	—	—	—
888	... ...	VMP4*	MSP4*	VMP4*	MHD4*	MPT4	UI2	—
		VMP4*	MS4P	VMP4*	MHD4*	—	PT4	PT4
Lissen								
8073 Battery	... ...	VS24	L21	PT2	—	—	—	—
8102	"	—	L21	L21	B21	—	—	—
8044	"	HL2	PT2	PT2	—	—	—	—
8099 }	"	S23	HL2	PT2	—	—	—	—
8098 }	"	S24*	HL2*	PT2	—	—	—	—
8100 "	Batt. Skyscraper	S24*	HL2*	PT2	—	—	—	—

MARCONI VALVES

Receivers	V1	V2	V3	V4	V5	V6	V7	V8
Lissen (cont.)								
4v. Batt. Skyscraper	VS24*	S24*	PT2	PT2	—	—	—	—
3v. A.C. Skyscraper	VMS4B*	MH4*	PT425	—	—	—	—	—
8093 } A.C. ...	VMS4B	MH4	MPT4	UI0	—	—	—	—
8095 } A.C. ...	MS4B*	MH4*	MS4B*	—	MPT4	UI0	—	—
6v. A.C. Superhet	MS4B*	MH4*	MS4B*	—	MPT4	UI0	—	—
Marconiphone								
22 Battery	HL2	LP2	—	—	—	—	—	—
23 "	L210	LP2	—	—	—	—	—	—
32 "	HL2	H2	P2	—	—	—	—	—
35 "	S23*	L210	LP2	—	—	—	—	—
39 "	S24*	HL2*	LP2	—	—	—	—	—
44 "	S23*	S23*	HL2*	P2	—	—	—	—
248 "	HL2	LP2	—	—	—	—	—	—
252 "	S23*	HL2*	PT2	—	—	—	—	—
257 "	X21	VS24*	HD21	QP21	—	—	—	—
260 "	VS2*	HL2*	PT2	PT2	—	—	—	—
273 "	VS2*	S23	VS24*	HD21	—	OP21	—	—
283 "	S23*	HL2*	PT2	—	—	—	—	—
284 "	S23*	HL2*	PT2	—	—	—	—	—
285 "	VS2*	HL2*	PT2	PT2	—	—	—	—
53 "	HL210	HL210	H2	HL210	P215	—	—	—
55 "	HL210	HL210	HL210	L210	P215	—	—	—
66 "	S23*	HL2*	HL2*	PT2	—	—	—	—
255 "	S23*	S23*	HL2*	S23*	HL2*	PT2	PT2	—
269 "	S23*	S23	V3*	HL2	PT2	PT2	—	—
22 A.C. Mains	MHL4	ML4	U5	—	—	—	—	—
32 "	MHL4	MH4	ML4	U5	—	—	—	—
39 "	MS4*	MH4*	P425	U5	—	—	—	—
42 "	MS4B*	MH4*	MPT4	UI0	—	—	—	—
47 "	MS4*	MHL4*	MH4	PX4	UI0	—	—	—
246 "	MH4	MPT4	UI0	—	—	—	—	—
253 "	MS4B*	MH4*	MPT4	UI2	—	—	—	—
262 }	MS4B	VMS4*	MH4*	MPT4	UI2	—	—	—
272 "	MS4B	VMS4*	MH4*	MPT4	UI2	—	—	—
264 "	—	—	—	—	—	—	—	—
297 "	R.G.	MX40	VMS4*	MHD4*	MPT4	MU12	—	—
287 "	—	—	—	—	—	—	—	—
276 "	—	MH4*	VMS4B*	VMS4B*	MS4B*	MH4	PX4	UI2
279 "	—	VM54*	MS4B	VMS4B*	MHD4*	MPT4	MUI12	—
296 "	—	MX40	VMS4B*	MHD4*	PX4	UI2	—	—
560 "	—	MS4*	MS4*	MHL4	PT625	UI10	—	—
235 }	—	VMS4B*	MH41	N41	UI2	—	—	—
240 "	—	VMS4B*	MH41	N41	UI2	—	—	—
330 A.C. Radio-Gram...	MS4B*	MH4*	MPT4	UI0	—	—	—	—
535 }	" "	MS4*	MH4*	MS4*	MS4*	MH4*	PX4	UI2
536 }	" "	VMS4*	MH4*	MS4*	VMS4*	MH4	PX4	UI2
256 }	" "	MS4B	VMS4B*	MHD4*	PX4	UI2	—	—
258 }	" "	MS4B	VMS4B*	MHD4*	PX4	UI2	—	—
254 }	" "	MS4B	MH4	MPT4	UI2	—	—	—
271 }	" "	MS4B	MH4	MPT4	UI2	—	—	—
274 "	—	—	—	—	—	—	—	—
286 "	—	—	MS4B	VM54*	MH4*	MPT4	UI2	—
288 "	—	—	MS4B	VM54*	MH4*	MPT4	UI2	—
289 "	—	—	MX40	VMS4B*	MHD4*	PX4	UI2	—
290 }	—	—	MX40	VMS4B*	MHD4*	PX4	UI2	—
291 }	—	—	MH4*	VMS4B*	VMS4B*	MS4B*	MH4	PX4
292 "	—	—	VMS4B*	MX40	VMS4*	MS4B*	MHD4*	MHD4*
42 }	D.C. Mains	DSB*	DH*	DPT	—	—	—	—
253 }	D.C. Mains	DSB*	DH*	DPT	—	—	—	—
262 }	D.C. Radio-Gram	DSB*	VDS*	DH*	DPT	—	—	—
278 }	D.C. Radio-Gram	DSB*	VDS*	DH*	DPT	—	—	—
276 "	—	DH*	VDSB*	VDSB*	DSB*	DH*	DPT	—
560 "	—	MS4	MS4	MHL4	PT625	—	—	—
254 }	D.C. Radio-Gram	DSB*	DH*	DPT	—	—	—	—
271 }	D.C. Radio-Gram	DSB*	DH*	DPT	—	—	—	—
280 "	—	DSB	VDS*	DH*	DPT	—	—	—
291 "	—	DSB	DH*	VDSB*	VDSB*	DSB*	DH*	DPT
330 "	—	DSB	DH*	DPT	—	—	DPT	—

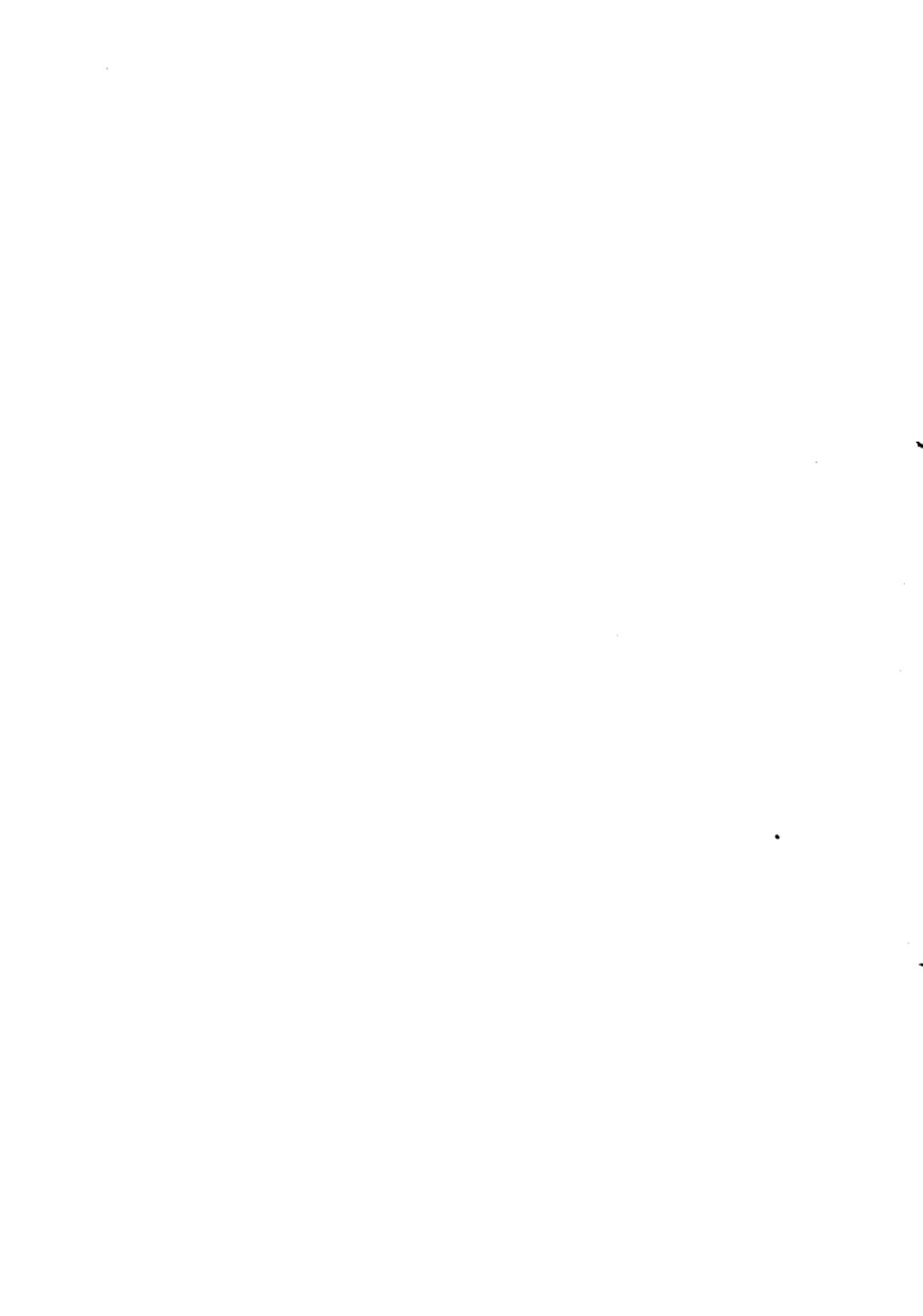
MARCONI VALVES

Receiver	V1	V2	V3	V4	V5	V6	V7	V8
Marconiphone (cont.)								
223 } A.C./D.C.	X30*	WD30*	N30G	U30	—	—	—	—
236 } "	WV30*	X30	WV30*	DH30*	N30/K	U30	—	—
336 Car Radio								
McMichael								
Batt. Suitcase Port.	S23	HL210	HL210	PT2	—	—	—	—
" Duplex Trans.	S23	HL210	HL210	P215	B21	—	—	—
" 335	VP21	X21	VP21	HD22	QP21	—	—	—
Duplex 4 S.M.G.	S23*	HL210*	HL210*	PT2	—	—	—	—
Duplex Mains 4	MS4B*	MSP4*	MH4*	MPT4	—	—	—	—
Twin Supervox	Catkin	Catkin	Catkin	Catkin	—	—	—	—
A.C. Superhet....	MS4B	MS4B	MH4	MPT4	—	—	—	—
" Transportable	—	VMS4	MHD4	MPT4	—	—	—	—
" Twin Speaker	VMP4	—	VMP4	MHD4	MPT4	—	—	—
A.C. 135	—	VMP4	D41	N41	DN41	—	—	—
A.C. 235	—	VMP4	DN41	U12	—	—	—	—
A.C./D.C. 535....	X30	W31	D41	N31	U30	—	—	—
Murphy								
B4	S24*	HL2*	HL2*	P215	—	—	—	—
B5	PT2	VS24*	HL2*	L21	—	—	—	—
B24	VP21	—	VP21	HD22	—	—	—	—
B25	VP21	—	VP21	HD22	—	—	—	—
A3	MS4B*	MH4*	MPT4	U12	—	—	—	—
A4	MPT4	VMS4*	MH4*	MPT4	U12	—	—	—
A8	VMS4*	MH4*	MS4B*	MS4B*	MS4B*	—	VMS4	MPT4
A24	—	VMP4	MHD4	N41	U12	—	—	—
A26	—	VMP4	MH41	N41	U12	—	—	—
A28	—	VMP4	MH41	N41	U12	—	—	—
Portadyne								
MC4—Battery	S23*	S24*	HL2*	PT2	—	—	—	—
AB5 "	S23*	S24*	L21*	L21	—	—	—	—
PB5 "	VS24*	L21*	L21*	L21*	—	—	—	—
Atlantic Suitcase 4	S23*	HL2*	HL2*	LP2	—	—	—	—
BMC4	S23*	HL2*	HL2*	PT2	—	—	—	—
Challenger	S23*	HL2*	HL2*	LP2	—	—	—	—
B74	VS24	VS24*	HD21	L21*	—	—	—	—
S/A.C.	MS4B*	VMP4*	MHD4*	MPT4	U12	—	—	—
A.C.3	MS4B*	MH4*	MPT4	—	—	—	—	—
A72 A.C.	MSP4	VMP4	MHD4	N41	MUI2	—	—	—
A37 "	MX40*	VMP4*	MHD4*	N41	MUI2	—	MUI2	—
PA6 "	VMP4*	MSP4*	VMP4*	MHD4*	N41	MUI2	—	—
Pye								
Presentation 2	HL2	PT2	—	—	—	—	—	—
Model 460	S24*	HL2*	L210	P2	—	—	—	—
P/B	VS24*	S24*	VS24*	L21	—	—	—	—
S/Q Batt	VS24	HL210	HL210	PT2	—	—	—	—
SP/B "	VP21	—	VP21	HD22	—	—	—	—
SE/B "	VS24	VS24	VS24	L21	—	—	—	—
T6	X21	VP21*	HD22	QP21	—	—	—	—
M.M.	MS4B*	MH4*	MPT4	—	—	—	—	—
G	VMS4*	MH4*	MPT4	—	—	—	—	—
SE/AC A.C.	VMP4	—	VMP4	DN41	—	—	—	—
SE/RG/AC "	VMP4	—	VMP4	DN41	—	—	—	—
SP/AC "	VMP4	—	VMP4	DN41	—	—	—	—
Cambridge Receiver	VMS4	MSP4	VMS4	MHD4	N41	—	—	—
Cambridge R.G.	VMS4	MSP4	VMS4	MHD4	N41	—	—	—
S.—Mains Superhet	VMS4*	MH4*	MS4B*	VMS4*	MH4*	MPT4	—	—
Twin Triple D.C.	DSB*	DSB*	DH*	DPT	—	—	—	—
P/AC.	VMS4*	MSP4*	VMS4*	MHD4*	MPT4	—	—	—
T7	MX40*	VMP4*	D41	N41	MUI2	—	—	—
T9	MX40*	VMP4*	MHD4*	PX4	MUI2	—	—	—
R.I.								
Class B ...	S24*	HL2*	L21	—	—	—	—	—
Micron Straight 3 Batt.	VP21	HL2	PT2	—	—	—	—	—

Receiver	MARCONI VALVES.							
	V1	V2	V3	V4	V5	V6	V7	V8
R.I. (cont.)								
Ritz Micron ...	—	VP21	HD22	QP21	—	—	—	—
Madrigal 3 ...	MS4B*	MH4*	MPT4	MU12	—	—	—	—
Table Model Superhet	MH4*	MS4B*	VMS4*	MH4*	MPT4	UI2	—	—
Ritz A.C.	—	—	VMP4	MPT4	UI2	—	—	—
Ritz Airflow "	—	—	VMP4	MPT4	UI2	—	—	—
Duotone R.G.	—	—	VMP4	MPT4	UI2	—	—	—
Moderne "	—	—	VMP4	MPT4	UI2	—	—	—
Ritz Twin Speaker "	MX40	VMP4	MHD4	N41	MU12	—	—	—
Radiogram ...	MS4B*	MH4*	VMP4*	MH4	MPT4	UI2	—	—
R.G.D.								
701 Auto R/Gram. A.C.	VMS4	MHL4	VMS4	VMS4	MH41	PX4	UI2	—
" " " D.C.	VDS	DH	VDS	VDS	DH	—	—	—
702 " " A.C.	VMS4B	MHL4	VMS4	VMS4B	MHD4	PX4	UI2	—
" " " D.C.	VDS	DH	VDS	VDS	DHD	—	—	—
901 " " A.C.	VMS4	MHL4	VMS4	VMS4	MHD4	MHL4	PX4 and V	PX4 9:-U12
" " " D.C.	VMS4	MHL4	VMS4	VMS4	MHD4	MHL4	Catkin 3. HM4 and V	2. PX4 9:-U12
I201 " " A.C.	VMS4B	MHL4	VMS4	VMS4B	VMS4B	MHD4	—	—
700 " " A.C.	VMS4B	VMS4B	VMS4	MHL4	MHD4	PX4	UI2	—
703 " " "	VMS4	VMS4	VMS4	MHD4	PX4	UI2	MHL4	—
I202 " " " D.C.	VMS4(3)	MH4 (4)	VDSB	VDS	PX4 (2)	UI2	MSP4	—
700 " " " D.C.	VDSB	DH	VDSB	DH	DHD	—	—	—
Telsen								
Victor 3—Battery	HL2	L210	P2	—	—	—	—	—
Triple 3 "	HL2	L210	P2	—	—	—	—	—
Class B4	S23	HL2	LP2	—	—	—	—	—
Super Selective 4	S23	S21	HL2	PT2	—	—	—	—
Super 6—Battery	VS24	HL2	S23	VS24	HL2	PT2	—	—
SG3—A.C.	MS4B	MH4	PT4	U10	—	—	—	—
Super 5—A.C.	MS4B	MH4	VMS4	MH4	MPT4	UI2	—	—
Macnamara	MS4B	MH4	MPT4	UI2	—	—	—	—
I240	MS4B*	MSP4*	N41	MU12	—	—	—	—
474 A.C.	MSP4	MSP4	N41	UI2	—	—	—	—
I240 R.G.	{							
3435 "								
3550 R.G. "		VMP4	VMP4	—	N41	UI4	—	—
Ultra								
22 Batt.	—	VP21	HD22	QP21	—	—	—	—
Battery Tiger Superhet	S23	VS24*	HL2	L21	—	—	—	—
Tiger 3 ...	MS4B*	MS4B*	MPT4	—	—	—	—	—
Panther 4 ...	MS4B*	MS4B*	MS4B	MPT4	UI10	—	—	—
Panther	VMS4*	VMS4*	MS4B*	MPT4	UI10	—	—	—
Lynx	VMS4*	VMS4*	MS4B*	MPT4	MU12	—	—	—
Tiger Superhet	MS4B*	VMS4*	MS4B*	MPT4	—	—	—	—
22 }								
44 A.C.	—	VMP4	DN41	MU12	—	—	—	—
25 }								
55 }								
66 AC ...	VMP4	MSP4	N41	UI2	—	—	—	—
Vidor								
CN212 Batt.	—	S24*	PT2	—	—	—	—	—
CN216 A.C.	VMP4*	MH4*	N41	MU12	—	—	—	—

NOTE.—*Denotes Metallised Valve.

NOTE. Although every care has been taken in compiling this list, no responsibility can be accepted for the recommendations therein. A heavy dash in any column indicates that there is no suitable Marconi equivalent.





THE MARCONI PHONE COMPANY LIMITED,

RADIO HOUSE, 210-212, TOTTENHAM COURT RD., LONDON, W.I.