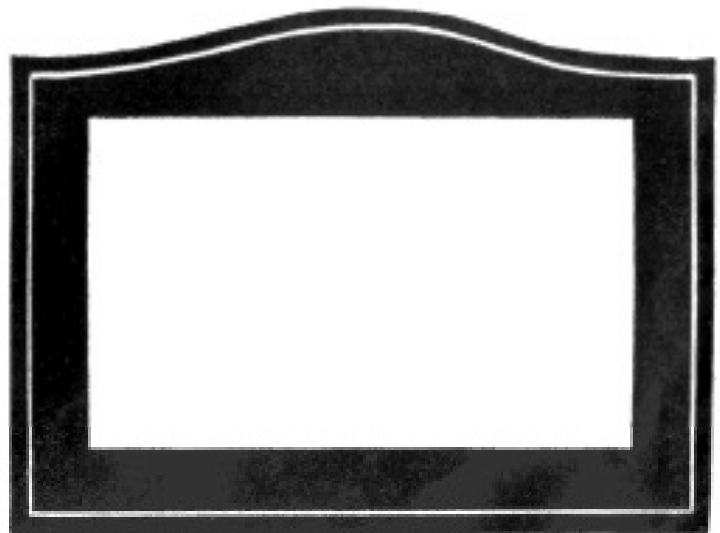


Curtis
Radio
Instruments

Duodyne SERIES.





INTRODUCTION.

THE serious amateur experimenter in Wireless can never be satisfied with any one instrument or circuit, however efficient this may be. In the nature of things he must be ever trying out this or that development, always pursuing the ever-changing yet fascinating goal of achievement.

The skill and experience of the amateur experimenter enables him to correctly value the exaggerated claims of imaginative advertisers, and may be relied upon to be appreciative of and to efficiently use such specialised components of which we are manufacturers. He, therefore, is far more interested in the illustrated catalogues of our specialised components than in the series of complete instruments referred to in this catalogue.

The fascinating entertainment and pleasure offered by modern broadcasting has created an almost limitless demand for efficient Wireless instruments, among those who have not the inclination, time, or aptitude to construct an instrument for themselves, but are yet desirous of selecting a suitable instrument of guaranteed performance, which, while affording maximum pleasure and entertainment, will demand neither skill nor an undue amount of patience in the process of its operation.

To meet such a demand, therefore, we have concentrated our facilities for research and resources for design and manufacture on the production of such complete **Wireless Receiving Instruments as will combine a simplicity of operation, which may be instantly mastered by the entirely inexperienced, with maximum radio efficiency, and guarantee a perfectly pure and faultless reproduction of music and speech.**



INTRODUCTION—continued.

The Duodyne Series of complete Wireless Receivers, in common with all Curtis Radio Instruments, will therefore readily appeal to the more discriminating, who have not acquired such a degree of enthusiasm for Wireless as to be deaf to the discordances usually associated with Wireless reproduction.

The Duodyne instruments are designed with the utmost care, are the product of perfect technical craftsmanship, and each instrument is individually subject to the most exhaustive tests so as to eliminate every potential cause of possible distortion.

By no means the least interesting feature of this catalogue is our departure from the ambiguous claims and vague generalities so typical of the usual Wireless catalogue. To assist the would-be purchaser in the selection of an instrument best suited to his individual requirements, we have set out the actual performances which may be expected from each instrument in terms of Loud Speaker and Headphone strength.

Every Duodyne Instrument, irrespective of type or price, carries with it a written guarantee of a minimum specific performance.

In answer to an insistent demand for an efficient Wireless Receiver for local broadcast, we have introduced two new models, the Duodyne Regenerative II and the Duodyne Regenerative III, which, although somewhat limited in distance range, are yet designed to efficiently operate a Loud Speaker at full strength and entirely free from distortion.

The Duodyne Regenerative Models have no High Frequency Amplification, and therefore, strictly speaking, do not follow the Duodyne circuit, which word is generally accepted to mean Aperiodic coupled, multiple High Frequency Amplification. We trust, however, we may be permitted to give these otherwise highly efficient instruments, without undue ambiguity, a name which enjoys so extraordinary a popularity and goodwill.



INTRODUCTION—continued.

The Duodyne Regenerative Models and the Duodyne Portable IV are fitted with 30-ohm filament rheostats and are therefore designed to function with Dull Emitter Valves or with valves not consuming more than .4 amperes. These models would be supplied suitable for the use of Bright Emitter Valves *only* when specified therefor.

The Duodyne High Frequency III and Duodyne V are designed to operate with Bright Emitter Valves as a standard equipment, but would be fitted with suitable rheostats for the use of Dull Emitter Valves *only* when specified therefor.

The following remarks refer to the Duodyne High Frequency III and the Duodyne 5-valve Models only :—

The development and perfecting of the Curtis Constant-Tuned High Frequency Aperiodic coupled Amplifier naturally gave us a High Frequency component of extraordinary merit, and thus enabled us to develop the Duodyne circuit for long distance reception.

The Duodyne Receiver, with its two stages of High Frequency Amplification, after nearly three years of open competition, still remains the most powerful long distance Broadcast Receiver available.

The Duodyne High Frequency V is primarily designed to operate on a standard P.M.G. aerial and earth, yet the reserve of High Frequency Amplification is sufficient to enable this instrument, under favourable conditions, to pick up anywhere in England some of the principal American Stations on a loud speaker, using an indoor aerial.

At the end of this catalogue will be found some practical experiences and opinions from owners, **which are eloquent of the remarkable and uniform efficiency of the Duodyne Broadcast Receivers.**

PETER CURTIS LTD.



Duodyne Regenerative II, Open Cabinet.
REF. No. D.R. 422.

THE Duodyne II REGENERATIVE.

The Duodyne II is a new addition to the Duodyne Series, which may be relied upon to fully sustain the high efficiency in operation and the robust stability associated with this illustrious name.

A regenerative circuit with one stage of note magnification, as illustrated, with enclosed valves and 30-ohm rheostats suitable for dull emitter valves.

Designed for operation with any standard plug-in type of inductance coils. Necessary coils to cover 300-450 metres included with standard equipment.

Audibility range with standard P.M.G. aerial :—

					Loud Speaker	Headphones
On 1½ kilowatts	..	..	..	..	25- 35 miles	100-200 miles
.. 3 ..	..	..	..	..	45- 60 ..	200-300 ..
.. 16-25 ..	..	..	..	..	150-200 ..	300-500 ..

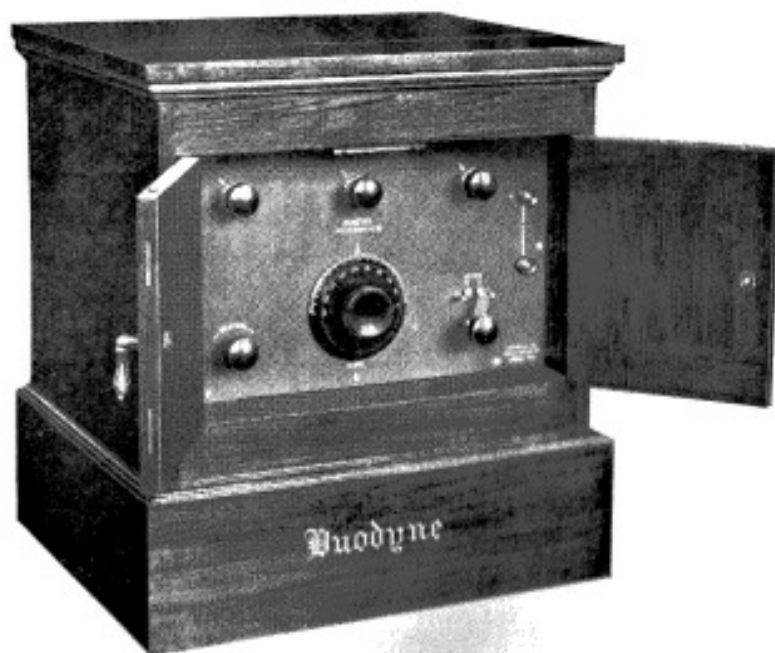
PRICE :

REF. No. D.R. 422.	Instrument only (without valves and batteries), illustrated above	£7 10 0
REF. No. D.R. 423.	As above, but in enclosed Cabinet with folding doors : see Ref.	
No. D.R. 425..	.. .. .	£10 10 0
Royalties (extra)	.. .. .	£1 5 0

"The Agent has purchased his stock under this guarantee and this label is his authority from us to refund you your money should the above conditions not be fulfilled."—Extract from written guarantee attached to every Duodyne.

The Guarantee for the above instrument is the minimum figure given in the table above.

NOTE.—For complete equipment see "Complete Equipment for Duodyne Receivers," Supplementary List.



THE Duodyne III REGENERATIVE.

The Duodyne Regenerative III is a new addition to the Duodyne Series, which may be relied upon to fully sustain the high efficiency in operation and the robust stability associated with this illustrious name.

A regenerative circuit with two stages of note magnification, as illustrated, with enclosed valves and 30-ohm rheostats suitable for dull emitter valves.

Designed for operation with any standard plug-in type of inductance coils. Necessary coils to cover 250-500 metres included with standard equipment.

Audibility range with standard P.M.G. aerial :—

	Loud Speaker	Headphones
On 1½ kilowatts	40- 50 miles	150-250 miles
„ 3 „	60-100 „	250-350 „
„ 16-25 „	250-300 „	500-600 „

Duodyne Regenerative III, Enclosed Cabinet,
REF. No. D.R. 425.

PRICE :

REF. No. D.R. 424. Instrument only (without valves and batteries), open cabinet similar to Ref. No. D.R. 422	£10 0 0
REF. No. D.R. 425. As illustrated above, enclosed cabinet with folding doors	£13 10 0
Royalties (extra)	£1 17 6

“ The Agent has purchased his stock under this guarantee and this label is his authority from us to refund you your money should the above conditions not be fulfilled.”—Extract from written guarantee attached to every Duodyne.

The Guarantee for the above instrument is the minimum figure given in the table above

NOTE.—For complete equipment see “ Complete Equipment for Duodyne Receivers,” Supplementary List.



Duodyne H.F. III, Open Cabinet,
REF. NO. D.R. 426.

THE Duodyne III HIGH FREQUENCY.

The Duodyne III (High Frequency) is an ideal Long Distance Detector Receiver, suitable for use with headphones.

Two stages High Frequency Amplification, automatic tuning. The first High Frequency valve functions through a Curtis Constant-Tuned High Frequency Amplifier, followed by a further stage of high frequency Amplification of an orthodox tuned anode circuit, with the last valve as a rectifier ; reaction to the anode coil.

The signal strength and purity of reception, characteristic of the Duodyne III, commends its use, in conjunction with a suitable power amplifier, for all public demonstration purposes.

Designed for operation with any standard plug-in type of inductance coils. Necessary coils to cover 250-500 metres included with standard equipment.

Audibility range with standard P.M.G. aerial for Headphones 2-4000 miles.

PRICE :

REF. NO. D.R. 426.	Duodyne III instrument only (without valves or batteries), as illustrated above	£10 0 0
REF. NO. D.R. 427.	As above, but in enclosed Cabinet with folding doors similar to Ref. No. D.R. 425	£13 10 0
	Royalties (extra)	£1 17 6

" The Agent has purchased his stock under this guarantee and this label is his authority from us to refund you your money should the above conditions not be fulfilled."—Extract from written guarantee attached to every Duodyne.

The Guarantee for the above instrument is the minimum figure given above.

NOTE.—For complete equipment see " Complete Equipment for Duodyne Receivers," Supplementary List.



THE Duodyne PORTABLE IV

NO AERIAL. NO EARTH. NO ACCUMULATORS.
NO EXTERIOR CONNECTIONS. ENTIRELY SELF-CONTAINED.

This High Frequency Duodyne 4-valve model is a long range Loud Speaker Receiver of remarkable efficiency, designed to operate on its own self-contained aerial.

An entirely new and exclusive circuit is employed, using one Curtis Constant-Tuned Aperiodic coupled High Frequency Valve, one Rectifier with two transformer coupled note magnifiers.

The Duodyne Portable IV is designed to operate with Dull Emitter '06 Valves; all batteries are fitted inside the cabinet.

The Duodyne Portable IV is a really neat and handsome Loud Speaker Receiver, entirely self-contained and requires no exterior connections whatever. Wave length 300-500 metres.

Duodyne Portable IV.
REF. NO. D.P. 428.

Audibility range with self-contained aerial under normal conditions—

		Loud Speaker	Headphones
On 1½ kilowatts	..	25-30 miles	100-200 miles
" 3 "	..	30-35 "	200-300 "
" 5 "	..	35-40 "	300-400 "
" 16-25 "	..	100-150 "	560-600 "

If a standard P.M.G. aerial and/or earth be connected, then the Loud Speaker range will be at least four times greater.

PRICE :

REF. NO. D.P. 428. The Duodyne Portable IV, complete with High and Low Tension Batteries, but without valves, in self-contained Mahogany Cabinet..	£16 0 0
REF. NO. D.P. 429. As above in Art Crocodile Leather	£17 0 0
Royalties (extra)	£2 10 0
4 D.E. Vita '06 Valves (extra)	£2 10 0

"The Agent has purchased his stock under this guarantee and this label is his authority from us to refund you your money should the above conditions not be fulfilled."—Extract from written guarantee attached to every Duodyne Portable IV. The Guarantee for the Duodyne Portable IV is the minimum figure given above.

NOTE.—For complete equipment see "Complete Equipment for Duodyne Receivers," Supplementary List.



Duodyne V. Open Cabinet.
REF. NO. D. 430.

THE Duodyne V

A Genuine Long Distance Loud Speaker Receiver.

Two stages High Frequency. Automatic Tuning.

The Duodyne V is the original and master model of the Duodyne Series. Although the name "Duodyne" has been used to include other models, the word is generally accepted to mean multiple High Frequency Amplification, aperiodic coupled.

The Duodyne circuit with its two stages of High Frequency Amplification constitutes one of the most powerful long distance Broadcast receivers on the market.

The Duodyne V is primarily designed to operate with a standard P.M.G. Aerial and Earth, yet the reserve of High Frequency

Amplification is so great as to enable this instrument, under favourable conditions, to pick up anywhere in England some of the principal American stations on loud speaker using an indoor aerial.

Every Duodyne V under normal conditions will receive the principal American Broadcasting Stations anywhere in the United Kingdom at a loud speaker strength equal to that from the local station.

The extreme simplicity and rock-like stability are by no means the least important features of the Duodyne circuit, which, combined with the faithful purity of reproduction, together constitute a long distance receiver of extraordinary merit and universal appeal.

Designed for operation with any standard plug-in type of inductance coils. Necessary coils to cover 250-500 metres included with standard equipment.

Audibility range with standard P.M.G. aerial :—

Headphones	3000-5000 miles.	Loud Speaker	1000-3000 miles.
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PRICE :

REF. NO. D. 430. The Duodyne V Open Cabinet type with enclosed valves and coil holder, instrument only, without valves or batteries, illustrated above	£18 0 0
REF. NO. D.C. 431. The Duodyne V Enclosed Cabinet type with enclosed valves and coil-holder, and provision for self-contained batteries—with folding doors (see p. 11). Instrument only, without valves or batteries	£22 10 0
Royalties (extra)	£3 2 6

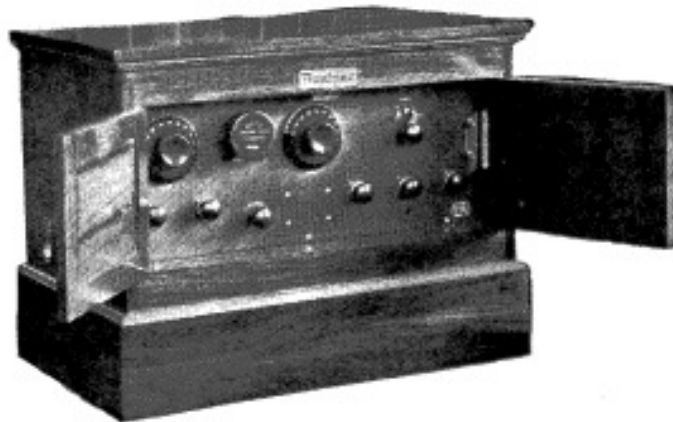
"The Agent has purchased his stock under this guarantee and this label is his authority from us to refund you your money should the above conditions not be fulfilled."—Extract from written guarantee attached to every Duodyne.

The Guarantee for the above instrument is the minimum figure given in the table above.

NOTE.—For complete equipment see "Complete Equipment for Duodyne Receivers," Supplementary List.



TESTIMONIALS:



Duodyne V. Enclosed Cabinet Model.
REF. NO. D.C. 431.

We reprint below a few letters and extracts from letters received from purchasers of Duodyne Instruments or constructors of the Duodyne circuit:—

I have pleasure in informing you that the Duodyne No. 3 set, purchased from you on December 19th last, gives me now entire satisfaction.

In accordance with my letter of the 16th inst., please find below the complete list of all stations tuned in on the set (in answer to the last paragraph of yours of 14/2).

ABERDEEN	AMSTERDAM	ECOLE SUPERIEURE
BELFAST	HILVERSUM	MADRID
BIRMINGHAM	BERLIN	ROME
BOURNEMOUTH	HAMBURG	STOCKHOLM
CARDIFF	FRANKFURT	ZURICH
DUNDEE	MUNSTER	2 KV WEYBRIDGE
GLASGOW	STUTTGART	CROYDON
MANCHESTER	EIFFEL TOWER	
NEWCASTLE	RADIOLA	

Most of the aforementioned stations are tuned in at will, and all of them are received with good volume and clearness with 2 LO cut out without any wave-trap. (Atmospherics permitting.)

I trust my experiences with the set will be useful to you, and I shall not fail to mention your esteemed firm whenever an opportunity arises.

I shall be pleased if you will kindly let me have a copy of your latest catalogue.

M. O. P., Cheam, Surrey.

I feel it only right to let you know how satisfied I am with the Duodyne V. Broadcast Receiver which I am using. The number of different stations I have had on the loud speaker is great, and during the evenings, when tuning with 'phones, the set is alive with different stations, of which many are foreign.

I have had an American station at good strength on the loud speaker, and the American stations come through easily at 'phone strength.

I cannot praise the Duodyne V. enough for long-distance work, and the instrument is a good investment for those who wish to hear other countries broadcasting on a loud speaker.

You may publish this (or part) as you wish.

F. A., — Regiment, Colchester, Essex.

It seems to me to be a very good all-round set, as it gives ample volume from B.B.C. stations for the loud speaker, even with four valves only operating. (This applies also to Radio Belge, Paris, Eiffel Tower and Madrid, and the half-dozen or so powerful German stations.)

On the other hand, using more reaction, it has picked up WBZ (Massachusetts, U.S.A.), with the three valves only, on the earphones, and operated both the above stations and WGY (New York) with four valves on loud speaker.

It may interest you also to know that the set, although not designed specially for the purpose, will pick up the short-wave transmissions of amateurs, when suitable coils are used.

J. W. K., Dalry, Ayrshire.

TESTIMONIALS—continued.

I have thoroughly tried out your Duodyne V, as made by myself, and am more than satisfied with it. Using an indoor aerial slung under the slates, I am able to receive all British main stations and four relays at very good loud-speaker strength, and am able to tune them in on the loud speaker. In addition, I have received on the loud speaker thirteen Continental stations, as well as KDKA on her higher wave-length. Through my recommendation, a friend of mine bought a set from you, and I have also made up three other sets for friends. You may use any part of this letter for advertising as long as names are not printed.

Blackburn.

We find your published testimonial quite correct *re* receiving America nearly as loud as 2 LO, as we did so ourselves first time of testing.

D. Bros., West Mersea, Essex.

I should like to take this opportunity of mentioning that I have made up the Duodyne V, and it is in every way a splendid circuit, and you can in fact get "music all round the dial."

J. W. W., London, E.15.

Will you please send me one of your Constant-Tuned High Frequency Amplifiers, Type A, 300-800 metres. I enclose cheque for 15/6 for same and postage.

I might add the one I got from you a week or two ago is doing well. I have built your Duodyne V., and am getting A1 results. I have tried all kinds of sets, but never one to equal yours, and it seems to be what I have been after for some time.

I. C. P., Cowling, Yorks.

Some days ago I received the ordered H.F. Amplifiers and envelope in good condition, and thank you much for same.

I immediately rearranged my T.A.T. Set accordingly for your H.F. Amplifiers, and experimented three nights on all European Broadcasting Stations. I have much pleasure to inform you that I am delighted with their performances. Tuning is very simple, signal strength wonderful, and faithfulness of music and speech remarkable. With ease I can get Brussels, all British and German stations, Madrid, Zurich, etc.

Your Amplifiers are not cheap, but as their performances are remarkable they are worth the money.

F. L. V., Amsterdam.

It may interest you to know I am a commercial operator, and at present my duties on board the S.S. call-sign The Duodyne V. is giving every satisfaction at my home in Scotland. I do not know if this is a record, but have received on loud speaker the following stations: All stations British Isles, KDKA, WOR, WJZ, KGO and KFI and WOC. Davenport, Iowa. The last three American Broadcast Stations were the reward of a special watch 0400-0800 G.M.T.

At the present time I can definitely say that it is the best five-valve set I have operated, and I have made somewhere between sixty and seventy, from a crystal set to five-valve sets.

F. V., Southall, Middx.



Peter Pan Answers Back!

A charming picture taken at the Broadcasting Station at the Cinematograph Garden Party, Botanical Gardens, Regent's Park. The Duodyne Portable IV operating the Brown Power Loud Speaker is eclipsed by the "Stars" in the foreground.



TESTIMONIALS—continued.

I am still very pleased with my Duodyne V. Receiver, and it does all you claim for it, being very smooth in action and a real pleasure to tune. Have heard Czechoslovakia and many other distant stations, including American ones, such as WBZ and KDKA, on favourable nights.

Of course, with London's higher power, it is rather necessary to use a wave-trap for the stations with wave-lengths within 60 metres of 2 L.O.

F. N. H., London, N.W.11.

It is a pleasure to inform you of the success of the Duodyne III. which I recently purchased from you. It is capable of doing all that it is claimed to do. To-night, just by way of example of what can be done, in two hours I have listened to the following (cutting out Manchester, which is working about three miles away from my residence) : Leeds and Bradford, Sheffield, Liverpool, Stoke-on-Trent, Hull, London (direct when Manchester was off), Birmingham, Aberdeen, Glasgow, two German stations, Petit Parisien, Chelmsford, and Radio Paris, and, of course, 2 ZY, and this without any wave-trap or undue interference whilst tuning. I used Cossor Wuncell Dull Emitters throughout.

H. J. B., Longsight, Manchester.

The Duodyne set recently purchased from you is giving my customer every satisfaction, or, to quote his words, it is " working admirably."

Ballater, Aberdeen.

No further comment is necessary, but these letters clearly establish the following facts :—

That the Duodyne (two stages H.F. constant-tuned aperiodic coupling) is the most powerful long-distance Broadcast Receiver on this or any other market.

That every Duodyne V. will receive the principal American Broadcasting stations anywhere in the United Kingdom at a loud-speaker strength equal to that from the local station.

That there is no standard Broadcast Receiver on any market, irrespective of design, type or price, which can approach the UNIFORM RECORD FOR LONG-DISTANCE RECEPTION consistently guaranteed with the Duodyne.

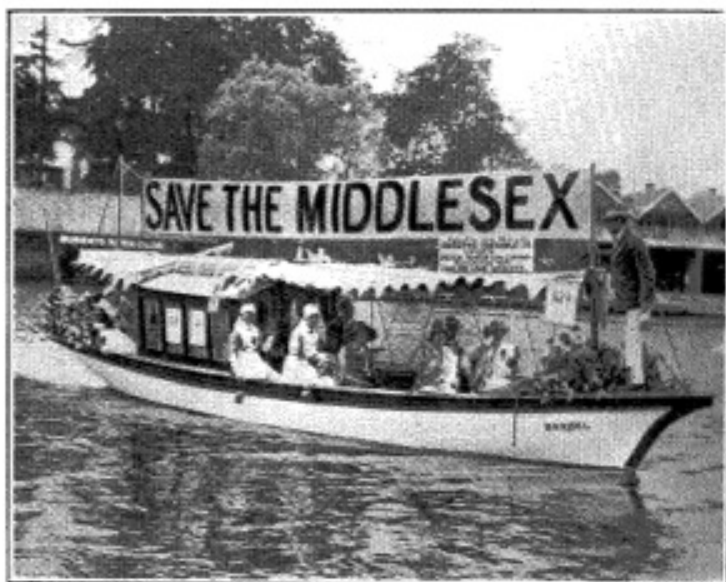
That the Duodyne circuit is far and away the MOST SIMPLE AND STABLE MULTIPLE HIGH FREQUENCY CIRCUIT AVAILABLE.

That this EXTREME SIMPLICITY and ROCK-LIKE STABILITY enables the Home Constructor to Build his own Duodyne with the assurance that his effort will result in the same degree of efficiency possible with our professionally constructed model.

That the " Hints to Constructors," which accompanies every instrument and contains full size simplified wiring diagrams and instructions, will enable even the totally inexperienced to repair his instrument should any connection become detached in its journey by air, train, or ship round the world.

That all the newcomers to the " —dyne " family merely offer greater selectivity when operating on a frame in the immediate vicinity of a transmitting station, and therefore can only appeal to those living within 5 miles of a powerful Broadcasting station ; but at any distance over 5 miles there is no " —dyne " which offers any advantage in selectivity, and certainly none that can uniformly guarantee even half the long-distance range possible with the Duodyne circuit.

*Designed and manufactured by
Peter Curtis, London, England.*



A Raid on the River on behalf of the Middlesex Hospital Reconstruction Fund.

In reference thereto, Lord Mildmay of Flete writes :

"....It is very remarkable that you are able to get such extraordinary quality of reproduction and volume with the Duodyne instrument. This would have been considered wonderful under any circumstances. It becomes all the more so when it is remembered that this little instrument was operating without any aerial or other ordinary attachment and in a petrol-engine-driven launch! Mildmay of Flete."

TESTIMONIALS—continued.

I have the pleasure to inform you that having constructed your Duodyne V. from the envelope, this has given me truly marvellous results.

It is supposed to be difficult to receive radio concerts here during the summer. I regularly receive every evening Rome and Vienna on loud speaker at full strength.

N. C. P., Alexandria.

I have now much pleasure in confirming my previous letter, and can say that the Duodyne V. is a success.

As all reception has to be done from considerable distance the sharpness of tuning is really extraordinary; it is at first rather difficult for a novice to find his stations, but once found results are more than usually good.

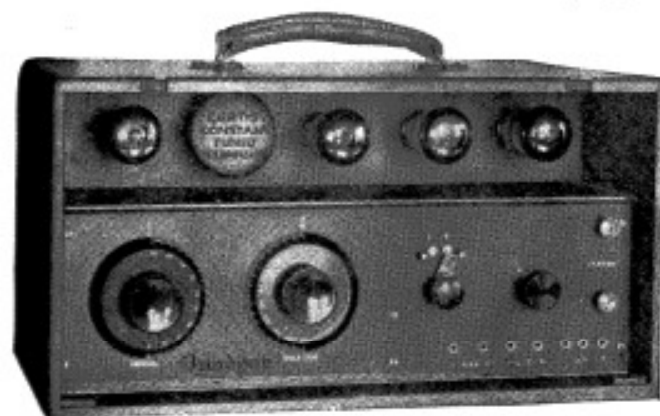
We have a 5-kilowatt ship station (E.A.O.) working continually on 600 metres 20 miles away, and when receiving London, Barcelona and Madrid on about 400 metres E.A.O. is not heard. Not many instruments will do this in practice.

F. G. S., Balearic Islands.

My Duodyne V. is doing first rate, and Glasgow, 40 miles off, is equally good whether I use earth or aerial (one without the other), or both, and when dark faintly on phones *without* either earth or aerial.

The Duodyne V. has AGAIN beaten the ----- (an extensively advertised instrument). My nearest neighbour has one of the latest, and when calling for him on Sunday evening, he tried to get Cardiff, the only station besides Edinburgh broadcasting at the time. He could not. I got both on Duodyne immediately.

P. S. McH., Ayrshire.



Special Duodyne Portable

Supplied to the order of the Chief Commissioner of Police, New Scotland Yard, London, S.W.



TESTIMONIALS—continued.

I am still very pleased with my Duodyne V. Receiver, and it does all you claim for it, being very smooth in action and a real pleasure to tune. Have heard Czechoslovakia and many other distant stations, including American ones, such as WBZ and KDKA, on favourable nights.

Of course, with London's higher power, it is rather necessary to use a wave-trap for the stations with wave-lengths within 60 metres of 2 LO.

F. N. H., London, N.W.11.

It is a pleasure to inform you of the success of the Duodyne III. which I recently purchased from you. It is capable of doing all that it is claimed to do. To-night, just by way of example of what can be done, in two hours I have listened to the following (cutting out Manchester, which is working about three miles away from my residence) : Leeds and Bradford, Sheffield, Liverpool, Stoke-on-Trent, Hull, London (direct when Manchester was off), Birmingham, Aberdeen, Glasgow, two German stations, Petit Parisien, Chelmsford, and Radio Paris, and, of course, 2 ZY, and this without any wave-trap or undue interference whilst tuning. I used Cossor Wuncell Dull Emitters throughout.

H. J. B., Longsight, Manchester.

The Duodyne set recently purchased from you is giving my customer every satisfaction, or, to quote his words, it is " working admirably."

Ballater, Aberdeen.

No further comment is necessary, but these letters clearly establish the following facts :—

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That every Duodyne V. will receive the principal American Broadcasting stations anywhere in the United Kingdom at a loud-speaker strength equal to that from the local station.

That there is no standard Broadcast Receiver on any market, irrespective of design, type or price, which can approach the UNIFORM RECORD FOR LONG-DISTANCE RECEPTION consistently guaranteed with the Duodyne.

That the Duodyne circuit is far and away the MOST SIMPLE AND STABLE MULTIPLE HIGH FREQUENCY CIRCUIT AVAILABLE.

That this EXTREME SIMPLICITY and ROCK-LIKE STABILITY enables the Home Constructor to Build his own Duodyne with the assurance that his effort will result in the same degree of efficiency possible with our professionally constructed model.

That the " Hints to Constructors," which accompanies every instrument and contains full size simplified wiring diagrams and instructions, will enable even the totally inexperienced to repair his instrument should any connection become detached in its journey by air, train, or ship round the world.

That all the newcomers to the " —dyne " family merely offer greater selectivity when operating on a frame in the immediate vicinity of a transmitting station, and therefore can only appeal to those living within 5 miles of a powerful Broadcasting station ; but at any distance over 5 miles there is no " —dyne " which offers any advantage in selectivity, and certainly none that can uniformly guarantee even half the long-distance range possible with the Duodyne circuit.

*Designed and manufactured by
Peter Curtis, London, England.*

TEST REPORT.

Messrs. PETER CURTIS LTD.,
75 Camden Road, London, N.W.1

DEAR SIRS,

I tested very thoroughly, and under, I think, adverse conditions, your Duodyne Portable IV. I now give you particulars of the results.

The first test was carried out on Sunday, 2nd August, at Luss, Loch Lomond, $24\frac{1}{2}$ miles in a direct line from 5 S.C., the Glasgow station.

The weather was warm and bright sunshine prevailed.

A range of hills lay between us and 5 S.C., and our position on the loch was at the foot of another range of hills.

The set was first used as sent out and in conjunction with a Brown's H.1 Type Loud Speaker. Speech could be clearly understood at 25 yards and music anything up to 200 yards away.

A length of C.T.5 cables (about 20 feet) was then connected to the aerial terminal and stretched along the ground. A "slight" increase in volume was noticeable and the set still remained exceedingly stable and free from oscillation, hand capacity, etc.

This same cable was next thrown over the car (the engine of which was running) and the same very fine reproduction and control obtained.

On returning the set Belfast could be heard faintly yet clear enough to be understood.

A second test was made just above Arrochar, on Loch Long, where we were hemmed in by hills and trees, and on the frame aerial 5 S.C., $27\frac{1}{2}$ miles away, came in very strong.

Last night I made a further series of tests in the Maryhill district, $1\frac{1}{2}$ miles from 5 S.C., on street level and within 20 yards of the overhead tramway wires.

2 E.H. (Edinburgh Relay Station, 200 watts) was tuned in very strongly and 2 D.E. (Dundee Relay Station, 200 watts) faintly, both without a trace of 5 S.C.

Belfast could be heard, but owing to our close proximity to 5 S.C. and the fact that only 17 metres separates, the Irish station could not be very successfully heard alone, Glasgow's strength being really abnormal.

A little human experiment I might now relate.

At the house where I made the test there resides an elderly lady who has not heard music or voice for over 30 years. Some time ago I tried to let her hear a radio transmission via a —, and was just successful and no more.

Last night I was reminded of that experiment and asked to try again, and I did so with astonishing results; the lady complaining that "it was *too loud*" to be comfortable and for the remainder of the evening that lady was dead to everything else but the wireless, and during the rendering of the Old Scots Folk Songs from London evinced great delight.

In conclusion, I would state that I have personally made many portable sets (various circuits) and tested many commercial sets, but have yet to meet the equal of the Duodyne Portable IV.

To close without mention of the H.F. Amplifier would be unfitting, as I consider this article a big advancement on the old method, especially where amateurs in H.F. amplification are concerned, the fact that it is constant-tuned (aperiodic, I presume) being very fine, and I intend incorporating one stage at least in my own set at home here.

The Mica Dielectric Condenser is a new idea, and when tested here gave exceedingly silent and fine results, and you are to be congratulated on attaining such a low minimum and freedom from hand capacity effects.

I remain, dear Sirs,

Yours truly,

J. A. Robertson, B.Sc.,

Messrs. Brown & Co.,

Scotland.