

Emmco

RADIO HANDBOOK

1927 EDITION)

Free Only to Users of Emmco Products

AUSTRALIAN AMATEUR CALL SIGNS
NEW ZEALAND AMATEUR CALL SIGNS
AUSTRALIAN BROADCASTING STATIONS
NEW ZEALAND BROADCASTING STATIONS
SHORT WAVE BROADCASTERS
CIRCUITS, WAVELENGTHS, TIMES
EMMCO RADIO PRODUCTS

ELECTRICITY METER MANUFACTURING CO.
LIMITED

WATERLOO - - SYDNEY



INTRODUCTION

LAST year the 1926 edition of EMMCO RADIO HANDBOOK, which was distributed free to all users of Emmco Radio parts through genuine Emmco Radio dealers, met with universal approval. The circuits, list of calls, other particulars for the information of broadcast listeners, together with the description of Emmco radio parts, all constituted a handbook which combined the essential particulars required by most radio enthusiasts, together with particulars and illustrations of the most popular parts for use by home constructors.

This 1927-28 edition has been revised to bring the data entirely up to date, and incorporates many new editorial features which changing radio conditions have rendered necessary. Included also in this enlarged edition are many new Emmco radio parts, such as "B" Battery Eliminators, Battery Chargers, A B C Eliminators, One Way, Two Dial Chassis, etc., which are already well known in Australia.

As explained elsewhere in this issue, Electricity Meter Manufacturing Co. Ltd. has found the demand for radio parts, together with many other departments of the Company's activities, to have increased to so enormous an extent that it has been found necessary to spend many thousands of pounds for the erection of an entirely new and tremendously enlarged factory, which will house every modern convenience and equipment necessary for the production of radio and electrical apparatus.

The basis of the Company's operations and advancement has been confidence—confidence in itself, its employees, and its products, coupled with the confidence of the public, has been the foundation upon which the Company has built up the biggest radio manufacturing business in the Commonwealth, and has placed Electricity Meter Manufacturing Co. Ltd. in the position of being one of the world's largest manufacturers of all types of radio parts, especially transformers.

It is almost unnecessary to say that all Emmco radio parts are absolutely guaranteed against manufacturing defects. The organization is such that the progress of every single article in the course of production may be followed, step by step, so that all parts are manufactured to exactly the same standard, every part is tested, and a high quality of production is maintained throughout. The Australian sales of Emmco radio parts to-day are more than double those of any other individual brand of radio parts, and it is no exaggeration to reiterate the statement that Emmco parts are universally accepted as symbolic of all that is best in accessories necessary for good radio reception.

New parts are being brought out every season, and the Emmco corps of radio engineers are working in close touch and co-operation with the best radio experts in America and England.

Buy and use Emmco products to get the best results in radio

BROADCASTING STATIONS IN AUSTRALIA

“ A ” CLASS

		METRES.	WATTS.	FREQ. KILOCYCLES.
2BL	Broadcasters (Sydney) Ltd., Sydney	353	5,000	849.3
3LO	Broadcasting Co. of Aust. Pty. Ltd., Melbourne	371	5,000	808.14
2FC	Farmer & Co. Ltd., Sydney ..	442	5,000	678.3
3AR	Associated Radio Co. Ltd., Melbourne	484	1,600	619.5
4QG	Queensland Radio Service, Brisbane ..	385	5,000	778.7
5CL	Central Broadcasters Ltd., Adelaide ..	395	5,000	759
6WF	Westralian Farmers Ltd., Perth ..	1,250	5,000	240
7ZL	Tasmanian Broadcasters Pty. Ltd., Hobart	516	3,000	560

“ B ” CLASS

2BE	Burgin Electric Co., Ltd., Kent Street, Sydney	316	100	949
2GB	Theosophical Broadcasting Station Ltd., Sydney	316	3,000	949
2KY	Trades and Labour Council, Sydney	280	1,500	1,070.8
2HD	H. A. Douglas, Newcastle, N.S.W. ..	288	100	1,039
2MK	Mockler Bros., Bathurst, N.S.W. ..	275	250	1,089
2UE	Electrical Utilities, South Randwick ..	293	250	1,024
2UW	O. Sandel, 213 Elizabeth St., Sydney ..	267	500	1,124
3DB	3DB Broadcasting Station, Swanston Street, Melbourne	255	500	1,179
3UZ	O. J. Nilsen & Co., Melbourne ..	319	100	939.9
4GR	Gold Radio Elec. Service, Toowoomba, Q'ld.	294	100	1,019
5DN	5DN Pty. Ltd., Parkside, S.A. ..	313	500	957.9
5KA	Sport Radio Broadcasting Station, 51 Kintore Ave., Prospect, S.A. ..	250	1,000	1,199

AUSTRALIAN RADIO CALL SIGNS

TABLE OF ABBREVIATIONS.

D	..	.. Dealer's Station
X	..	.. Experimental Amateur Station
L	..	.. Land Station
P	..	.. Portable Station
S	..	.. Special
T	..	.. Trawler

NEW SOUTH WALES.

Call Sign.	Class.	Name and Address.
2AB	X	A. V. Badger, 20 Neutral-st., North Sydney
2AC	X	G. C. Edwards, Waikare, Lane Cove-road, Lane Cove
2AD	X	A. L. Dixon, 59 Second-street, Canterbury
2AG	D	Ashfield Service Station, Ashfield
2AN	X	W. Gardner, Central Mine, Piper Street, Broken Hill
2AR	X	V. H. Hudson, 1 Terrace-rd., Dulwich Hill
2AS	X	A. J. Smith, 27 Station Street, Harris Park
2AV	X	A. W. Thurstan, Argyle-road, Penshurst
2AY	X	J. P. Cureton, 203 Burwood-road, Burwood
2BA	T	Bar-eu-Mal (c/o Red Funnel Fisheries Ltd.), Sydney
2BC	X	N. J. Hurl, Northcote Avenue, Killara
2BD	L	Barren Jack Dam (Public Works Dept.)
2BF	X	L. E. Forsyth, "Hoylake," Sailor Bay-rd., Northbridge.
2BK	X	F. N. Leverrier, Wentworth-road, Vaucluse
2BM	X	Bernard Martin, Mona-street, Bankstown
2BR	T	"Brolga" Coastal Trawlers Co., Golds-brough Chs., Sydney
2BS	X	H. B. Sunter, 3 Flat, Ambassadors Court, Bondi-rd., Bondi Beach
2BV	X	Waverley Amateur Radio Club, 89 Macpherson-street, Waverley
2BW	X	W. H. Barker, Wallace-street, Concord
2BY	X	E. C. Arnold, Binnia Street, Coolah
2CA	L	Cootamundra Public Works Department
2CC	X	Sydney University
2CL	X	G. Caletti, Beauchamp-street, Punchbowl
2CM	X	C. D. Maclurcan, Agnes-street, Strathfield
2CR	X	L. V. G. Todd, Denison-street, West Tamworth
2CS	X	L. T. Swain, Frederick-street, Waratah
2CU	X	D. D. Campbell, Ulmarra
2CX	X	H. A. Stowe, "Rawene," Royal-st., Chatswood
2CZ	X	G. W. Exton, 173 Molesworth-st., Lismore
2DE	X	W. P. Renshaw, "Waimea," Lord-street, Roseville
2DG	X	D. G. Campbell, Sunny Ridge, Kyogle
2DI	T	"Dibbiu," c/o Cain and Sons, Municipal Fish Markets, Sydney
2DJ	X	F. B. Cooke, Namoi-road, Northbridge
2DN	X	C. E. H. Blandford, 47 Foord-av., Hurlstone Park
2DS	X	R. R. Davis, "Yuruga," Fisher-avenue, Vaucluse
2DU	T	"Durendee," c/o Red Funnel Fisheries, Woolloomooloo
2DY	X	D. G. Lindsay, Burgoyne-street, Gordon
2EC	X	E. C. Crouch, Spencer-street, Mosman
2EH	X	H. Miller, Ness-avenue, Dulwich Hill
2EM	X	E. J. T. Moore, 180 Kurra Road, Neutral Bay
2FG	X	F. Gibbons, 24 Phillips-st., Neutral Bay
2FK	X	F. Welch, 1 Augusta-rd., Manly
2FM	X	F. H. Murray, Glendower, Dumaresq-road, Rose Bay
2FP	X	E. J. Baker, 62 Estell-street, Maryville
2FR	X	F. R. Bassett, "Ramona," Carrington-st., Bexley

Call Sign.	Class.	Name and Address.
2FT	X	L. R. Filmer, "Bundee," Toronto
2GA	X	Miss F. V. Wallace, cr. Richard and George-streets, Greenwich
2GC	X	G. C. Cawood, Kurrajong Creek, Dorrigo
2GD	X	Concord Radio Club, 12 Wallace-street, Concord
2GI	L	Gundagai Public Works Department
2GM	X	G. M. Coutts, 10 Simpson-street, Mosman
2GO	T	"Goorangai," c/o Cain and Sons, Municipal Fish Markets, Sydney
2GP	X	C. S. Mackay, Urunga
2GQ	X	E. Barlow, Guildford
2GU	T	"Gunundaal" Coastal Trawlers Co., Golds-brough Chs., Sydney
2GW	X	W. G. Woolnough, Park Avenue, Gordon
2HC	X	H. R. Carter, The Armidale School, Armidale
2HH	X	H. H. Davis, Torrington-rd., Strathfield
2HM	X	H. A. Marshall, 94 Francis-street, Bondi
2HS	X	Franker & Hooker, 38 Phillip St., Bondi
2HT	X	H. K. R. Thomas, Strathearn, Murdoch-st., Neutral Bay
2IJ	X	A. H. Gray, 5 Flat, "The Maples," Killara
2IN	X	J. Payne, 53 Allison-rd., Randwick
2JA	X	A. J. Mead, 13 Hamden-st., Ashfield
2JC	X	E. J. Cawthorn, Los Angeles, Cootamundra
2JD	X	J. B. Davies, 1 Mill's Crescent, Burwood
2JK	X	J. H. Brown, Shadwell, Chelmsford-avenue, Botany
2JL	X	J. L. Young, Bulli Plain, Corowa
2JP	X	J. H. A. Pike, Rawson-street, Epping
2JR	X	J. G. R. Reed, 7 Sloan-street, Summer Hill
2JS	X	J. M. Stanley, 97 Byng Street, Orange
2JT	X	C. F. A. Luckman, "Aldersey," Wangee-rd., Lakemba
2JU	X	J. L. White, Cowra Station, Torraringee Station
2JW	X	E. J. Williams, 51 Ocean-ave., Double Bay
2JY	X	J. W. Young, "Yothahnee," Eastern-road, Turramurra.
2KC	X	R. H. Fry, "Baretta," Brighton-street, Croydon
2KF	X	K. Fryer, "Zealandia," Lumsden-street, Suspension Bridge
2KO	T	"Koragga," c/o Coastal Trawler Co., Golds-brough Chs., Sydney
2KT	X	L. M. Secombe, 20 Villiers-street, Rockdale
2KW	X	A. Grant, Taylor's Arm, Roadside, Macks-ville, N.S.W.
2LC	X	L. C. Presdee, 20 Norton-street, Leichardt
2LH	X	Leichardt Radio Club, 176 Johnston-street, Annandale
2LL	X	L. S. Lane, "Narbeth," The Ave., Randwick
2LM	X	L. M. Wilson, 6 Kalimna Flats, Reginald-st., Cremorne
2LO	X	L. N. Schultz, "Waraba," Burns Bay-rd., Lane Cove
2LP	X	L. P. R. Bean, 86 Muston-street, Mosman
2LR	X	R. L. Rowe, 36 Alfred-street, Milson's Point
2LW	X	L. J. Wellman, 18 Meek's-rd., Marrickville
2LY	X	R. H. Shaw, 129 Graffton-st., Woolahra
2MH	X	C. E. Morton, "Saida," Underwood-rd., Homebush
2ML	X	Mosman Research Labs. (E. C. Crouch), 100 Muston-street, Mosman
2MM	L	"Murrumburrah" (Public Works Dept.)
2MR	X	J. E. Stewart, Gorrick-street, Mayfield
2MS	X	Max. Spitzkowsky, 3 Veda-street, Hamilton
2MU	X	J. Nangle, Observatory, Sydney
2MW	X	L. G. Wearne, "Essbank," Windon-avenue, Croydon.
2NI	X	H. B. Hammond, "Chesterfield," Chester-field-rd., Epping

Australian Radio Call Signs—Continued

Call Sign.	Class.	Name and Address.
2NO	X	D. B. Knock, 142 South Head Road, Vaucluse
2NS	X	T. Evans, Charles-street, Blayney
2OB	X	L. W. Mashman, "Gresley," 8 Donnan-st., Bexley
2OG	X	G. J. Menin, "Wilga," Ramsay-street, Haberfield
2PA	X	Public Works Department
2PB	X	" " " "
2PL	X	" " " "
2PQ	X	" " " "
2PR	X	" " " "
2PS	D	P. G. Stephen, Mona-street, Granville
2QA	T	Trawler "Goonabee," Sydney
2QB	T	Trawler "Milimulul," Sydney
2QD	T	Trawler "Beryll," Sydney
2QJ	T	Trawler "Jane," Cam and Sons, Sydney
2QT	X	A. H. Mutton, 31 Stafford-street, Stanmore
2RB	X	R. E. Beljon, 92 Lawrence-street, Lithgow
2RC	X	R. Chilton, Gloucester
2RE	X	R. M. E. Rees, 608 Old South Head-road, Bellevue Hill
2RG	X	E. C. Reading, Charlotte-street, Bangalow
2RH	X	P. R. Hentye, "Eagleton," Gordon-road, Killara
2RJ	X	R. J. Fagan, Sunnyridge, Mandurama
2RM	X	R. A. Macfarlane, Wakaden-street, Griffith
2RO	X	R. W. Turnbull, 2 Ethel-street, Burwood
2RP	D	R. Primmer, Gordon street, Gordon
2RT	X	R. J. Turner, 259 Sloane-street, Goulburn
2RV	X	R. V. Thomas, 18 Plover-st., North Bondi
2RW	X	R. W. Cusiter, "Bellaire," Kissing Point-road, Turramurra
2RX	X	H. C. St. John, 82 Gibbs-street, Rockdale
2RZ	X	J. N. Atkinson, 50 Spencer-road, Mosman
2SA	X	W. E. Salmon, Poldhu, cr. Park-rd. and Olympia-st., Naremburn
2SB	X	A. Sibly, 20 Carrabella-st., Kirribilli
2SH	X	A. Short, Young Street, Lambton
2SM	X	H. W. S. Caldecott, Quinton-rd., Manly
2SP	X	R. Evans, "Garth Craig," 6 Flood-street, Clovelly
2SS	X	A. E. Wright, Coledale
2ST	X	S. E. Tatham, 160 Castlereagh-st., Sydney
2SW	X	C. L. Southwell, "Khan Uni," Kameruka-road, Northbridge
2SX	X	C. W. Slade, Rockleigh, Lang-st., Croydon
2TB	D	T. H. Squelch, Byron-street, Bangalow
2TK	X	T. K. Abbott, Murrulla, Wingen
2TM	X	H. E. A. Turner, "Carmen," 13 Erith-street, Mosman
2TY	X	T. R. Troy, "Glenroy," Great Northern-rd., West Maitland
2UI	X	Illawarra Radio Club, 75 Montgomerie-st., Kogarah
2UK	X	H. L. Sigal, 91 Jersey-rd., Woollahra
2VS	X	V. E. Stanley, 9 McLean-avenue, Chatswood
2WA	X	W. A. Royle, 329 New South Head-road, Edgecliffe
2WB	X	W. N. Bullivant, Charles-street, Albury
2WC	X	W. Cavanagh, "Crexy," Wyde-st., Potts Pt.
2WE	X	Standard Telephones & Cables Ltd., 200 Castlereagh-street, Sydney
2WG	X	W. D. Graham, 44 Cameron-st., Rockdale
2WH	X	W. H. R. Stitt, Wandary, Forbes
2WI	X	W. I. A. (N.S.W. Div.), 5 Elizabeth-street, Sydney
2WJ	X	W. J. Peell, 3 Chapman-street, Summer Hill
2WK	X	W. D. Kennedy, 16 Mabel-st., Willoughby
2WL	X	W. L. Carter, 53 Cardigan-street, Stanmore
2WR	X	Wahroonga Radio Club, East Anglia, Young-street, Wahroonga
2WS	X	W. S. Breden, Kitchener-parade, Newcastle
2WT	X	C. R. Watt, Warrenfels, Tenterfield
2WW	X	"Wireless Weekly (A. W. Watt)," "Folkestone," Lavender-street, Lavender Bay
2WZ	X	W. J. Zech, 124 Parramatta-road, Ashfield
2XA	X	H. K. James, 12 Rosemount-avenue, Summer Hill
2XI	X	W. A. Craig, "Uabba," Irrara-st., Croydon
2YB	X	Croydon Radio Club, Lang-street, Croydon
2YD	X	C. W. Donne, 12 Palm Court, Eaton Avenue, Darlinghurst
2YH	X	W. H. Hannan, "Glen Osmond," 23 Prince Alfred-street, Mosman

Call Sign.	Class.	Name and Address.
2YI	X	P. Spencer Nolan, "Monesk," 152 Bellevue road, Double Bay
2YJ	X	R. H. Sainsbury, "Kermanshah," 6 Wallray-street, Concord West
2ZJ	X	A. W. Simpson, Sibbick-street, Five Dock
2ZL	X	W. Otty, Hurst Villa, Killingworth, via Newcastle
2ZO	X	T. R. Willmot, Coramba-road, S. Grafton
2ZU	X	N. S. Gilmour, 101 Wycombe-road, Neutral Bay
2ZX	X	J. M. Bristow, "The Towers," Kurraba-Road, Neutral Bay
2ZY	X	N. Woollett, 33 Wolsley-road, Mosman

VICTORIA.

3AD	X	J. A. Davey, 28 Cole-st., Elsternwick
3AF	X	A. I. W. Bent, 14 Coronation-st., Geelong W.
3AH	X	A. H. Faul, 3 St. Leonard's-av., St. Kilda
3AJ	X	E. Salamy, Timor-street, Warrnambool
3AK	X	N. V. Cansick, 81 Southey-st., St. Kilda
3AL	X	H. D. Kerr, 1214 Sturt-st., Ballarat
3AM	X	A. Forecast, 22 St. George's-rd., Malvern
3AP	X	R. D. Morris, 61 Bealiba-rd., Caulfield
3AT	X	A. W. Thomson, "Arbroath," Ridley-st., Sunshine
3AU	X	S. H. Milligan, "Allawah," Nicholas-street, Chilwell
3AY	X	W. W. Jenvey, "Devonshire," 12 Lord-street, Caulfield
3BC	X	Brighton Radio Club, Higinbotham Hall, Brighton
3BD	X	E. H. Cox, 41 Orrong-rd., Elsternwick
3BG	X	Laing, Osbourne, Terang
3BH	X	C. R. Whitelaw, Gillies-st., Benalla
3BK	X	S. C. Baker, Clarendon-st., S. Melbourne
3BL	X	J. C. Fitchett, 13 Holmewood-av., Brighton
3BM	X	H. K. Love, "Lindum," Ferncroft-av., East Malvern.
3BP	X	J. H. Hood, 6 Alexander-st., East St. Kilda
3BQ	X	W. F. M. Howden, 10 Hill-st., Box Hill
3BY	X	H. Holst, 27 Bamba-rd., Caulfield
3CA	X	C. A. Hughes, Ingor-st., Ararat
3CB	X	W. F. Sievers, 30 Lesney-st., E. Richmond
3CC	X	University, Melbourne
3CF	X	C. I. Falconer, 13 Norris-st., Canterbury
3CH	L	H. C. Harris, Sherwood-st., Birchip
3CI	D	Cliffy Island Lighthouse
3CJ	X	C. J. Manning, Whitehorse-rd., Ringwood
3CK	X	Ernest Cook, Glenhope, Tresco
3CM	X	F. W. Cooke, 23 Henry-st., Footscray
3CP	X	C. J. Patterson, 82 Burke-rd., E. Malvern
3CR	X	Coburg Radio Club, 80 Sydney-rd., Brunswick
3CS	X	C. J. Sabelberg, 100 Station-st., P. Melbourne
3DA	X	R. S. Dawson, 23 Kensington-rd., S. Yarra
3DB	X	Drewleigh Business College, Melbourne
3DC	X	S. A. Embling, 296 William-st., Toorak
3DJ	X	D. A. J. Stocks, 35 Highfield-rd., Canterbury
3DP	X	N. C. Culliver, 91 Manningtree-rd., Hawthorn
3DR	X	J. H. Dexter, 23 Beaconsfield-pde., Northcote
3EF	X	H. W. Maddick, 89A Spray-st., Elwood
3EH	S	Metropolitan Fire Brigade, Eastern Hill
3EJ	S	Metropolitan Fire Brigade, Eastern Hill
3EL	X	N. J. Boyd, Pearce-st., Caulfield
3EM	X	H. W. Doudney, 7 Dickens-st., Balaclava
3EP	X	J. Givens, 19 Logan-st., Canterbury
3ER	X	H. W. Read, 147 Lygon-st., E. Brunswick
3EW	X	E. S. Yorston, "Hoversta," Hawthorn-rd., Caulfield
3FA	D	Kerang Motors, Scoresby-st., Kerang.
3FR	X	C. E. H. Robson, 16 Hawsleigh-av., Balaclava
3FY	X	Fitzroy Radio Club, 72 Henry-st., N. Fitzroy
3GF	X	G. J. Frogley, 5 Richmond Terrace, Richmond
3GG	X	G. A. Gamon, 310 Clark-st., Northcote
3GH	X	W. M. Hale, "Ben Nevis," Harvey-street, Anglesea
3GI	X	E. G. Cresswell, 5 Loch-st., Camberwell
3GL	X	G. L. Bathdold, 72 Union-st., Malvern
3GM	X	G. R. McCulloch, 511 Havelock-street, Ballarat

Australian Radio Call Signs—Continued

Call Sign.	Class.	Name and Address.
3GN	X	H. G. Selman, 51 Fairview-av., Newtown
3GR	X	G. H. Rumbold, 120 Wells-st., Bendigo
3GS	X	G. S. C. Semmens, State School, Queenstown
3GW	X	H. G. Williamson, Rainbow
3HA	X	H. H. Blackman, 44 Osborne-av., E. Malvern
3HB	X	Sunshine Radio Club, Hampshire-rd., Sunshine. (H. Bird.)
3HH	X	F. H. Mughan, 15 Staniland-av., Malvern
3HL	X	A. T. Hutchings, Byron Avon, Calawadda
3HR	X	A. H. Reid, 3 Kingston-st., E. Malvern
3JD	X	J. E. Dane, "Wahroonga," Toorak-road, Hawthorn
3JG	D	Jones & Glew, 122 Toorak-rd., Camberwell
3JJ	X	J. J. McNath, 54 St. Vincent Place, Albert Park
3JK	X	J. K. Herd, Main-st., Bacchus Marsh
3JM	X	R. W. Bryson, 149 Eglinton-st., Kew
3JO	X	C. L. Ruck, 3 Glentil-rd., E. Malvern
3JP	X	H. E. M. Michell, "Glennard," Kean-street, Caulfield
3JS	X	J. Schultze, Glenferrie (24 York-st.)
3JW	X	R. W. Bruce, 87 Alma-road, Caulfield
3JZ	X	R. P. Whalley, Cumnor, Myrtleford
3KB	X	A. L. H. Kissick, 7 McFarland-st., Brunswick
3KG	X	Radio Engineering Co., 101 Foam-st., Elwood
3KJ	X	W. E. C. Sawyer, Suncligh Park, Hurstbridge
3KM	X	Kerr & Muir, 241 Bay-st., North Brighton
3KN	X	R. A. A. F., Victoria Barracks, St. Kilda-rd., Melbourne
3KR	X	K. R. Rankin, Boundary-st., Kerang, Vic.
3KX	X	H. C. McCalman, "Ivanhoe," Dryden-st., Canterbury
3LD	L	Deal Island, Lighthouse
3LF	X	J. F. T. Baker, 82 Beavis-rd., Northcote
3LG	X	L. G. Glew, 73 Elphin-st., Newport
3LJ	X	L. J. Simmons, State School, Foster N.
3LP	X	L. A. Paul, 137 St. George's-rd., N. Fitzroy
3LR	X	Elsternwick Radio Club, A.N.A. Hall, Regent-street, Elsternwick.
3LS	X	R. T. Busch, 20 Wordsworth-st., Moonee Ponds
3LW	X	C. Hiam, 222 Carlisle-st., St. Kilda
3MA		Queen-street
3MB		Ballan
3MC		Rockbank
3MD		Portable
3ME		Braybrook
3MH	X	M. H. Stuart, 571 Mt. Alexander-road, Moonee Ponds
3MI	X	J. R. Alsop, "Nirvana," 28 Molesworth-st., Kew
3MJ	X	J. F. Martin, 17 Newry-st., North Fitzroy
3MM	X	B. Pringle, 29 Collins-st., Essendon
3MP	X	S. V. Hosken, Queen-street, Surrey Hills
3MS	X	L. J. Moore, "Avalon," Railway Grove, Seymour
3MY	X	L. D. Money, 8 Maling-rd., Canterbury
3ND	X	Police Patrol Car No. 1
3NN	X	H. R. Brown, Yanac
3OT	X	R. M. Cameron, "Manuka," Coonil Crescent, Malvern
3PD	S	Police Department (Headquarters), Russell-street, Melbourne
3PJ	X	V. L. Smyth, 130 McIvor-st., Bendigo
3PL	X	L. P. Learmouth, McIntyre-st., Hamilton
3PX	X	N. S. Taylor, 24 Dalgety-st., St. Kilda
3QH	X	J. F. Feldman, Forest-st., S. Geelong
3RA	X	R. A. Parker, c/o. Royal Bank, Bendigo
3RB	X	R. N. Buzacott, 532 New-st., Elsternwick
3RI	X	Railways Inst., Wireless Club, Flinders-st., Melbourne
3RK	X	T. E. Evans, 21 Brunswick-rd., E. Brunswick
3RL	X	R. Lightn "Nothgl," 232 Alma-rd., East St. Kilda
3RN	X	Northcote Radio Club, 82 Gooch-street, Thornbury
3RP	X	R. L. Payne, 39 Retreat-rd., Geelong
3RS	X	R. C. Shortell, 421 Inkerman-st., St. Kilda
3RW	X	R. B. Wookey, 158 Kilgour-st., Geelong
3RY	X	G. G. Soulleux, Yacht "Utiekah 111," Port Phillip Bay
3SA	X	L. R. Simpson, "Montana," Queen-street, Ararat
SJ	X	S. J. Mitchell, 5 Brandon-st., Brighton

Call Sign.	Class.	Name and Address.
3SL	X	L. W. Southwell, c/o. Mrs. Neal, High-st., Seymour
3SR	X	J. Sullivan, Vallourn
3SW	X	S. W. Gadsen, 5 Miller Grove, Kew
3TC	X	T. P. Court, 4 Sorrett-av., Malvern
3TM	X	A. H. Buck, 7 Carrington-st., Glenferrie
3TR	X	W. S. Treagar, 22 Cole-st., Upper Hawthorn
3TU	X	R. C. Leckie, "Clifstone," 40 Bamfield-st., Sandringham
3UI	X	R. M. Dalton, 28 Canterbury-rd., Canterbury
3US	X	A. A. Watson, 345 Richardson-st., Middle Park
3VP	X	C. W. Baker, "Ewell," 101 Williamson-st., Bendigo
3VR	X	R. N. Abbott, 52 Blanche-st., St. Kilda
3WB	X	W. L. Bertram, 158 Blyth-st., E. Brunswick
3WG	X	W. R. Gronow, 12 Ackland-st., St. Kilda
3WH	X	A. W. H. Chandler, "Cliff's House," Beach-road, Beaumaris
3WI	X	W. I. A., Victoria Division, Ashburton
3WJ	X	S. M. Sandford, "Rostin," Welch-st., Kyneton
3WM	X	W. J. M. McAuley, "Mia Mia," Union-st., Brunswick
3WP	L	Wilson's Promontory Lighthouse
3WR	D	Wangaratta Sports Depot
3WS	X	W. M. Sweeney, 10 Foam-street, Elwood
3XC	X	Xavier College, Kew
3XF	X	M. Chaffer, 41 Norwood Crescent, Moonee Ponds
3XO	X	F. J. Adams, "Bambra," Moule Avenue, Middle Brighton
3XW	X	C. A. Cullinan, Bayview, Digger's Rest
3YX	X	B. Hardie, Missouri-av., Garden Vale
3YY	X	A. M. Bush, 54 Brougham-st., Bendigo
3YZ	X	A. McKeown, 54 Yarra-st., Alphington
3ZH	X	Police Patrol Car No. 2
3ZK	X	F. R. Bradley, "Worthing," Beach Crescent, Sandringham
3ZN	X	M. Israel, "Atossa," Station-st., Burwood
3ZR	X	L. Snaith, 1 Byron-st., Footscray
3ZY	X	M. Ireson, 576 Drummond-st., South Yarra

QUEENSLAND.

4AB	X	W. F. Bardin, McIlwraith-st., S. Townsville
4AC	X	A. C. Walker, Oxford-st., Sandgate
4AK	X	J. Milner, Woodland-st., Ashgrove, Brisbane
4AN	X	W. L. Gibson, Kirkland-av., Greenslopes
4AT	X	A. Bauer, "Banerive," Rose-st., Annesley
4AW	X	A. E. Walz, enr. Eton-st. and Sandgate-rd., Nundah
4AZ	X	F. V. Sharpe, "Ashton Hall," Old Sandgate-road, Woolooin
4BD	X	B. D. Grimes, Tarragindi-rd., Annesley
4BM	D	A. B. Milne, Mackay (Mirose Motors)
4BN	X	E. R. Cooling, Donation Lane, Toowoomba
4BY	X	H. W. Berry, 101 Flight R. A. A. F., Bowen
4BW	X	A. Cooper, Lloyd-st., Mareeba
4CF	X	C. Fortescue, "Matlock," Arthur-street, Toowoomba
4CG	X	C. H. Gold, Drake-st., Hill End, Brisbane
4CK	X	E. L. Norris, "Parkview," Hume-st., Toowoomba
4CM	X	Dr. V. McDowall, Observatory Tower, Wickham Park
4CP	X	C. R. Pinney, Konedobu, Port Moresby, Papua
4CR	X	C. F. Rich, London Bay Missionary Station, Fife Bay, Papua
4CS	X	J. Geraghty, Christian Brothers' College, Toowoomba
4CU	X	C. Walker, Devonport-st., Clifton.
4CW	X	A. T. Buck, Geebung, North Coast Line
4DA	X	E. Eggleton, Grenier-st., Toowoomba
4DC	X	D. F. Cribb, Foxton-st., Indooroopilly
4DO	X	H. L. Hobler, 8 Lennox-st., Rockhampton
4EC	X	E. E. Sims, R.A.A.F., Bowen
4EG	X	E. E. Gold, Lindsay-st., Toowoomba
4EI	X	State Engineer, General Post Office, Brisbane
4ES	X	E. N. Sagae, Moonthalie, Douglas-street, Greenslopes

Australian Radio Call Signs—Continued

Call Sign.	Class.	Name and Address.
4FK	X	V. F. Kenna, "The Laurels," Allen-street, Hamilton, Brisbane
4GO	X	G. Oxlade, cnr. Badger-av. and Irving-st., Newmarket
4GR	X	Gold Radio Service, Lindsay-st., Toowoomba
4HB	X	H. E. Baker, Gowrie Station, Charleville
4HG	X	H. G. Bell, "Roseberry," Sandford-rd. South Toowoong
4HL	X	H. L. Miller, Lloyd-st., Coorparoo
4HM	X	H. L. Milburn, 10th Street, Home Hill.
4HW	X	H. D. Walsh, "Valima," Toorak Hill, Hamilton
4JG	X	C. J. Grant, cnr. Victoria Parade and Old Sandgate-road, Woolloowin
4JJ	L	Orioms Oil Ltd., Papua (350 George-street, Sydney)
4KR	X	J. K. Richardson, Ascot Downs, Barcardine
4KY	X	H. J. Coffey, 6 Oxford-st., Hamilton
4LG	X	S. W. Le Grand, 7th Avenue, Windsor, Brisbane
4LJ	X	L. J. Feenaghty, Dickson-st., Woolloowin
4MC	X	M. J. McPherson, Merinda, via Bowen
4MF	X	D. C. Winterford, "Morlancourt," Collins-st., Annesley S., Brisbane
4MM	X	M. M. O'Brien, Fevings-st., Toowong
4NW	X	T. W. Starkie, "Pendarves," Sandgate-rd., Nundah
4PG	X	P. J. Golden, "Ben My Chree," Waterview-avenue, Wynnum
4PJ	X	P. F. Jessop, Kamma, near Edmonton
4RB	X	R. J. Browne, "Clifden," Church-street, Toowoong
4RG	X	H. J. Stephenson, Thorold-st., Woolloowin
4RK	X	R. K. Knight, "Forest Lodge," Jellicoe-st., Toowoomba
4RP	D	Robertson & Provan Ltd., Toowoomba
4SM	X	W. G. Iku, River-rd., New Farm, Brisbane
4SR	L	Waitara Oil Co. Ltd., Sepik-rd., Papua
4TC	X	Toombul Radio Club, cnr. Eton-st. and Sandgate-rd., Nundah
4WA	X	W. A. Young, Granville-st., West End, Brisbane
4WB	X	W. H. Bright, Hume-st., Nth. Toowoomba
4WE	X	W. E. Vining, Brickland-rd., Nundah
4WF	X	W. Finney, "Milbong," Arthur Terrace, Red Hill, Brisbane
4WH	X	W. E. Hagarty, Kingfisher-st., Longreach
4WI	X	W. I. A. (Queensland Division), Queen-st., Brisbane
4WN	X	Woolloowin Radio Club, c/o. F. J. Thomas, Willmington-street, Woolloowin
4WR	D	H. D. Walsh, Dickson Terrace, Hamilton
4WS	X	W. F. Scott, 229 Boundary-st., West End, Brisbane
4YN	D	D. J. Harkin, 101 Flight R.A.A.F., Bowen

SOUTH AUSTRALIA.

Call Sign.	Class.	Name and Address.
5AC	X	V. R. P. Cook, 37 John's-rd., Prospect
5AE	X	J. M. Honner, Alpha-rd., Prospect
5AG	X	W. J. Bland, Buller Terrace, Alberton
5AH	X	F. L. Williamson, 25 Dequetville Terrace, Kent Town
5AM	X	P. Kennedy, State Engineer's Office, G.P.O., Adelaide
5AQ	X	Sacred Heart College, Glenelg
5AW	X	A. W. Kelly, c/o Lyndale Winery, Lyndoch
5AX	X	A. H. Traeger, Bridgallow-av., Kensington Gardens
5BD	X	F. E. Earle, 6 Hakewell-road, St. Peters
5BF	X	F. G. Miller, Eleanor Terrace, Murray Bridge
5BG	X	H. A. Kauper, 6 Rothbury-av., Tusmore
5BJ	X	R. A. Bruce, 1 Henry-st., Glenelg
5BN	X	H. L. Austin, 8 Parade, Norwood
5BP	X	R. B. Caldwell, 53 Hughes-st., Unley
5BR	X	Blackwood Radio Club, Waite-street, Blackwood
5BW	X	J. G. Phillips, 31 Partridge-st., Glenelg
5BX	X	A. L. Saunders, 17 Esplanade, Glenelg

Call Sign.	Class.	Name and Address.
5BY	X	D. E. Whitburn, cnr. Cudmore and Sprod-avenues, Toorak Gardens
5CM	X	R. M. Anthony, 3 High-st., Unley Park
5DA	X	S. R. Buckerfield, 4 Regent-st., Parkside
5DP	X	H. E. Brock, 14 Cambridge Terrace, Malvern
5DX	X	D. G. Taylor, 67 Victoria-st., Forestville
5GB	D	G. Bailey, Mount Gambier
5HG	X	H. M. Cooper, 51 Hastings-st., Glenelg
5HP	X	Hyde Park Radio Club, 18 Commercial-rd., Hyde Park
5HY	X	A. A. Cotton, Harvey-st., Kilkenny
5JA	X	P. J. Brewer, 21 Douglas-st., Parkside
5JH	X	V. Chennell, 53 Osmond Terrace
5JL	X	J. Henry, Ware Hill Station, via Katherine
5KW	X	K. Wadham, 2 Elizabeth-st., Parkside
5LA	X	L. M. Atkins, Brougham-st., Magill
5LF	X	L. F. Sawford, Mead-st., Peterhead
5LH	X	L. H. Northeast, Addison-rd., Rosewater
5LP	D	A. L. Perry, Strathalbyn (Star Engineering Works)
5MA	X	M. B. Anderson, Torrens-rd., Cheltenham
5MB	X	H. M. Brown, 24 Northcote-st., Torrensville
5MU	X	South Australian Railway Institute, Murray Bridge Division, Railway Superintendent's Office
5PM	X	J. E. Vardon, 11 Belle Vue Place, Unley Park
5PR	X	Port Radio Club, Hagedman-rd., Pennington
5QP	X	K. M. Theel, 81 First-av., St. Peters
5RB	X	R. Bedford, Kyancutta Cottage Hospital, Kyancutta
5RG	X	R. G. Gurner, 220 Glen Osmond-street, Fullarton Estate
5RI	X	South Australian Railway Institute, North Terrace Railway Station, Adelaide
5RJ	X	D. N. Hancock, 14 Railway Terrace, Kadina
5RM	X	R. M. Barker, 49 Newbon-st., Prospect
5SA	X	E. R. Turner, 10 Godfrey Terrace, Leabrook
5SF	X	S. G. Ackland, 74 John's-road, Prospect
5SL	X	L. Fielder, Claire-street, Woodville
5SR	X	South Suburban Radio Club, Castle-street, Parkside
5WA	X	W. K. Adamson, 25 Olive-st., Parkside
5WH	X	W. H. Barber, 50 Somerset-av., Cumberland
5WI	X	Wireless Institute of Australia (S. A. Division), 6 Bakewell-rd., St. Peters
5WP	W.	S. Pitchford, 318 Wakefield-st., Adelaide
5WS	X	West Suburban Radio Club, 44 King-st. Mile End
5XG	X	K. J. Nalpas, 13 Lipson-avenue, Kadina

WESTERN AUSTRALIA.

Call Sign.	Class.	Name and Address.
6AB	X	C. Cecil, 162 Central Ave., Marylands
6AG	X	W. E. Coxon, 5th Avenue, Inglewood
6AK	X	University of W.A., Perth
6BB	X	J. C. W. Park, 29 Suburban-road, Mill Point, S. Perth
6BH	X	F. H. Burrows, Government School, E. Kalgoorlie
6BN	X	A. E. Stevens, 7 Ruth-street, Perth
6BO	X	A. E. Gray, Archdeacon-street, Nedlands
6BW	X	C. D. McLauchlan, 14 Clydesdale st., Victoria Park
6CJ	X	E. J. Darley, Darley-st., Perth.
6DA	X	F. W. Saw, 76 Leonard-st., Victoria Park
6DH	X	D. C. Hardisty, 2 Duncan-st., Victoria Park
6DW	X	D. W. Edgar, Glenentrie, New Norcia
6DZ	X	E. W. Burrows, Station House, Geraldton
6GB	X	G. B. Sutherland, 36 Fairfield-st., Mt. Hawthorn, Perth
6GM	X	G. A. Moss, Willis-st., Cottesloe Beach
6HB	X	H. B. Johnston, 119 Bourke-st., Leederville
6HE	X	H. E. Cox, Marine Terrace West, Geraldton
6JJ	X	T. J. Jewell, Leithfield-st., Victoria Park
6JL	X	J. L. White, Brooklands, via Grass Valleys
6KM	X	A. Saar, Post Office Buildings, Eucla
6KX	X	H. T. Simmons 34 First Avenue, Inglewood
6LS	X	L. Symonds, Clyde-st., Cottesloe Beach
6LT	X	L. L. Throssell, May-st., Northam
6MC	X	M. C. Hoad, 154 Gloucester-st., Subiaco

Australian Radio Call Signs—Continued

Call Sign.	Class.	Name and Address.
6MU	X	M. S. Urquhart, Hawkestone-st., Cottesloe
6PL	X	P. E. C. Lindsay, 16 Clive-st., West Perth
6SA	X	S. C. Austin, 39 Sussex-st., Victoria Park
6SR	X	Subiaco Radio Society, Fire Station, Rokely Rd., Subiaco.
6VK	X	J. Vincent, 124 Varden-st., Kalgoorlie
6VP	X	Victoria Park Radio Club (O. E. Kemich), 12 Fremantle-road, S. Perth
6WP	X	W. R. Phipps, 83 Carnarvon-st., Victoria Park

TASMANIA.

Call Sign.	Class.	Name and Address.
7AB	X	A. C. Smith, 21 High-st., Launceston
7AH	X	F. W. Medhurst, Beach-rd., Lower Sandy Bay
7AR	X	C. F. Johnson, "Huendon," Ryde-street, W. Hobart
7AS	X	A. S. Gill, 17 Frankland-street, Launceston
7BK	X	T. A. C. Preston, King-street, Queenstown
7BQ	X	L. J. Crooks, 64 Frederick-st, Launceston
7BT	X	E. C. Sheldrick, 15 Richards-av., Launceston

Call Sign.	Class.	Name and Address.
7CH	X	C. Harrison, Rokeby-rd., Bellerive
7CS	X	A. C. Scott, 14 Law-st., Launceston
7CW	X	C. Walch, 36 Bath-st., Battery Point, Hobart
7DX	X	W. T. Watkins, 146 Warwick-st., Hobart
7GD	X	G. A. Douglas, Lochleven, Gormanstown
7GH	X	G. L. Hall, Waddamana
7HL	X	Hubert F. Lovett, 14 Summerhill-rd., West Hobart
7HR	X	Hobart Radio Research Club, 57 Elizabeth Street, Hobart
7JK	X	J. F. Heine, 305 Elizabeth-st., Hobart
7LA	X	L. A. Hope, 210 George-st., Launceston
7LJ	X	L. R. Jensen, 15 Bayley-st., Glebe, Hobart
7MK	X	E. F. Cooper, Edgely House, Youngtown
7NP	X	National Portland Cement Co., Maria Island
7NW	X	N. W. Gillham, 38 Grosvenor-st., Sandy Bay
7OM	X	R. D. O'May, Esplanade, Bellerive
7PF	X	P. Oakley Fysh, 46 Mary-st., Launceston
7RS	X	R. S. Hope, 210 George-st., Launceston
7WI	X	Wireless Inst. of Aust., 181 Charles-street, Launceston.
7VX	X	G. W. Steane, c/o Messrs. Knight & Peters, 128 Brisbane-street, Launceston

Broadcasting Stations in New Zealand

1YA	The Radio Broadcasting Co. of N.Z. Ltd., Auckland	.. .. .	333 meters	..	500 watt
1ZB	La Gloria Gramophone Co., Karangahape Road, Auckland	.. .. .	275 "	..	50 "
1ZQ	L. R. E. Keith, Gordon Road, Mt. Albert, Auckland	.. .. .	330 "	..	50 "
2YA	The Radio Broadcasting Co. of N.Z. Ltd., Wellington	.. .. .	420 "	..	3,000 "
2ZF	The Palmerston North Radio Club, The Square, Palmerston North	.. .. .	230 "	..	50 "
2ZM	The Gisborne Radio Co., 7 Wainui Road, Gisborne	.. .. .	200 "	..	500 "
3YA	The Radio Broadcasting Co. of N.Z. Ltd., Christchurch	.. .. .	306 "	..	500 "
4YA	The Radio Broadcasting Co. of N.Z. Ltd., Dunedin	.. .. .	463 "	..	750 "

List of New Zealand Amateur Transmitting Stations

Call Sign.	Name and Address.
1AB	Waite, S. G., 54 Marlborough-st., Dominion-rd., Auckland
1AF	Smithson, G. W., 39 Surrey-st., Ponsonby, Auckland.
1AG	Roberts, F., 24 Kimberley-rd., Epsom, Auckland.
1AH	Hartle & Gray Ltd., 7 Alken-rd., Auckland.
1AI	Sterling, H. H., 65 River-road, Hamilton
1AJ	Shepherd, N. C., 1 North's-road, Whangarei.
1AK	Claxton, W. H., Parawai, Thames.
1AL	Adair, B. R., Ponsonby, Auckland.
1AM	Isherwood, J. C., 17 Clyde-st., Whangarei
1AN	Arthur, H. B. M., 9 Sentinel-road, Auckland
1AO	White, R. G., Veronica-av., Mt. Albert, Auckland
1AP	Winch, A. J., Brady-st., Te Awamutu
1AQ	White Is. Products Ltd., Sulphur Pt., Tauranga
1AT	Swain, G. S., Mahoe-st., Te Awamutu
1AU	Aubin, R. E. L., 224 Manakau-rd., Parnell, Auckland
1AV	Reardon, F. C., 1544 Hobson-st., Auckland
1AX	Arbell, R. J., 15 Oxford Terrace, Cheltenham, Devonport, Auckland
1AY	Woskett, H. C. A., Grey-av., Pukinui, Auckland
1AZ	Sherson, J. R., 14 Stanley-street, Claudelands, Hamilton
1FA	West, G. R., White Island, Auckland
1FB	Gulde, G. T., Hospital Hill, Opotiki
1FC	Burrell, R. F. D., East Lake-road, Milford, Auckland
1FD	Booth, F. R., 28 Rosstrevor-st., Hamilton
1FE	Wood, A. F., Waihou
1FG	Lonsdale, J., "Heathdale," Maroheno

Call Sign.	Name and Address.
1FH	Steel, J. M. M., 260 Balmoral-rd., Edendale, Auckland
1FL	Liggins, J. B., Queen-street, Thames
1FM	Warn, J. E. B., 19 Woodford-rd., Mt. Eden, Auckland
1FN	Stace, G. O. M., Stanley-road, Te Aroha
1FO	Cooper, E. R., 8 London-street, Ponsonby, Auckland
1FP	Anchor, J. L., 8 Queen's-av., Frankton Junction
1FR	Gillies, R. H., 11 Avon-st., Parnell, Auckland
1FS	Dickson, L. R., Buckland's Beach, Auckland
1XI	Auckland University College, Princes-street, Auckland
2AA	Brown, A. S., 14 Christian-st., Dannevirke.
2AB	Wilkinson, D., 110 St. Hill-st., Wanganui
2AC	O'Mears, I. H., 209 Harris-street, Gisborne
2AD	Stevens, P. R., 4 Rutene-road, Gisborne
2AE	Patty, R. J., 37 Salisbury-road, Gisborne
2AF	Sinclair, W. J., Score-road, Gisborne
2AG	Strong, S. W. S., Harris-street, Gisborne
2AH	Roberts, R. V., 11 May-av., Napier
2AJ	Parminster, V. H., 286 Cuba-st., Wellington
2AL	Mellars, L. M., 112 Ridgeway-st., Wanganui
2AM	Buist, W. F., Cnr. Collins and High-sts., Hawera
2AN	Weston, M. L., 47 Barraud-st., Dannevirke
2AO	Brunnette, A. J., Hector-st., Seatoun, Wellington
2AP	Armstrong, J. L., Maungataniwha, Wairo
2AQ	Coutts, M. W., Kuku-st., Taihape
2AR	Rennie, A. M. M., 67 Campbell-st., Wanganui
2AS	Boyle, H. R., 1 Breakwater-rd., Napier

New Zealand Amateur Transmitting Stations—Continued

Call Sign.	Class.	Name and Address.
2AT		Halloran, A. T., 2 Hinau-rd., Hataitai, Wellington
2AU		Wilde, S. F. M., Manaroa, Shannon
2AV		Chatfield, R. G., 42 Taraora-rd., Kelburn, Auckland
2AX		Kyle, J. V., 50 Waldegrave-st., Palmerston North
2AY		Bitossi, 32 Devon-st., Wellington
2AZ		McDonald, H. L., 89 Hamilton-rd., Hataitai
2BD		Cunningham, N. R., Public Trust Building, Masterton
2BG		Tinney, J. G., 74 Kainui-rd., Hataitai, Wellington
2BJ		Evans, A., 269 Taranaki-st., Wellington
2BK		Hanson, L. A., 77 Linton-st., Palmerston South
2BL		Wellington Coll. Radio Club, Wellington Boys' College, Wellington
2BN		Hislop, S. J. K., 8 Fitzroy-rd., Napier
2BP		Macklin, W. N., 75 Waipapa-rd., Hataitai, Wellington
2BQ		Edmundson, E. D., 8 May-av., Napier
2BR		Lambert, K. A., "Belmont," Tayforth Wanganui
2BS		Hunter, W. R., Barker's Hill, Gisborne
2BT		Tanner, R. A., Karere-rd., Longburn
2BV		Lane, F. J. K., 31 Manawatu-st., Palmerston North
2BX		Black, R. G., 22 Stafford-st., Wellington
2GA		Johnson, J., Fortunatus-st., Brooklyn, Auckland
2GB		Gribbon, C. W., 39 Devonport Bldgs., St. Aubyn-street, New Plymouth.
2GC		Howarth, A., 12 High-street, Dannevirke
2GG		Brown, C. H., 70 Wallace-st., Wellington
2XA		Shrimpton, W. A., 38 Rongatai Terrace, Wellington
3AC		Radio Society of Christchurch, Farmers' Saleyards, St. Asaph-st., Christchurch.
3AD		Fooks, A. C. L., Cnr. Parks and Peter-streets, Ashburton
3AF		Ball, L. F., 210A Waltham-rd., Christchurch
3AH		Courts, H. B., 69 Grey-rd., Timaru
3AI		Rangiora High School, East Belt, Rangiora
3AJ		Blake, R. G. F., c/o V. C. Hopkins, South Belt, Rangiora

Call Sign.	Class.	Name and Address.
3AL		Dawson, W. M., 236 Willis-st., Ashburton
3AM		Halcrow, L. A., 7 Tui-street, Fendalton, Christchurch
3AN		Edwards, S. St. D., 26 Patten-street, Avonside, Christchurch
3AP		Cooper, A. McD., Willis-st., East Ashburton
3AQ		Clark, R. H., 12 Cooper's-rd., Shirley, Christchurch
3AR		Buchanan, D. W., 74 Willis-st., Ashburton
3AT		Marquet, L. J., 30 Chichester-street, Woolston, Christchurch
3AU		Hills, H. W., 97 White-street, Rangiora
3AV		Willis, S. P., Ashburton
3AW		Mintrom, R. W., 62 Barton-street, Woolston, Christchurch
3AX		Twemlow, F. A., 119 Rossall-st., Christchurch
3CF		Simpson, A. E. H., 99 Aberley-rd., St. Albans, Christchurch
3CG		Brown, H. P. V., 10 Merivale Lane, Christchurch
3XA		Rolleston House Society, Rolleston House, Rolleston-avenue, Christchurch
4AA		Bell, F. D., Shag Valley Stn., Waihemo, Palmerston South
4AC		Robinson, R. E., 3 Cheltham-av., Dunedin
4AD		Jordan, A. E., 34 Bigger-st. Invercargill
4AE		Brown, G. E., Ardwick-st., Gore
4AH		MacDonald, J. S., 45 Royal Terrace, Dunedin
4AK		Shiel, W. L., Macandrew-road, Dunedin
4AL		Grubb, A. H. M., c/o Miss F. Johnston, Gore
4AN		Partridge, L. O. B., 4 Islington-st., Dunedin
4AO		Shrimpton, H. N., Coney Hill-road, Dunedin
4AR		Wilkinson, W. G., 21 Melrose-street, Roslyn, Dunedin
4AT		Stone, J., 34 Grove-street, Dunedin
4AV		Milnes, J. L., 39 Less-street, Dunedin
4AZ		Sidney, T. K. S., 11 Corstorphine-road, Caversham, Dunedin
4BA		Smith, J. G., 7 Crosby-st., Mornington Gisborne

World List of Short Wave Stations

This list shows particulars of stations maintaining fairly regular schedules. It does not include several which are temporarily used for experiments.

Wave-length (Metres)	Call Sign	Station
12.25	AGA	Nauen
13.5	AGA	Nauen
14.09	NU-2XBC	Rocky Point, N.Y.
14.28	F-FW	Ste. Assise
14.93	NU-2XS	Rocky Point, N.Y.
15.0	GLS	Ongar
	NU-2XAW	Schenectady, N.Y.
16.0	AGA	Nauen
	WSS	Rocky Point, N.Y.
16.02	NU-2XT	Rocky Point, N.Y.
16.57	WLL	Rocky Point, N.Y.
17.0	SPI	Rio de Janeiro
	NKF	Bellevue, Anacostia, D.C.
18.0	POF	Nauen
20.0	AGK	Nauen
	NAL	Navy Yard, Washington, D.C.
	OCTN	Mourillon, Toulon
	POX	Nauen
	GFR	Flowerdown, Hants, R.F.A.
	GLSQ	S.S. "Olympic"
	J-IPP	Tokyo
20.8	NKF	Bellevue, Anacostia, D.C.
21.0	PCTT	Kootwijk, Holland
21.4	WDI	Harrison, Ohio
21.48	WIK	New Brunswick, N.J.
21.8	KEB	Los Angeles, Calif.
22.0	VIS	Sydney, N.S.W.
	VIT	Townsville, Queensland
23.0	PKH	Soerabaja, Java
23.25	FFW	Sainte Assise

Wave-length (Metres)	Call Sign	Station
23.3	WBQ	Schenectady, N.Y.
24.0	GBL	Leafield
	GBM	Leafield
24.3	KFD	Denver, Colo.
24.5	GLQ	Ongar
24.7	NKF	Bellevue, D.C.
25.0	PCMM	The Hague
	POY	Nauen
	HZA	Saigon
25.5	AGB	Nauen
25.6	NKF	Bellevue, D.C.
25.728	VIZ	Melbourne (Beam Station)
25.906	GBH	Grimby (Beam Station)
26.0	AGA	Nauen
	VIS	Sydney, N.S.W.
	WNU	New Orleans, La.
26.086	GBK	Bodmin (Beam Station)
26.269	CG	Montreal (Beam Station)
26.6	AGB	Nauen
27.0	PCPP	Kootwijk, Holland
	RCRL	Cent. Lab., Leningrad
27.5	PCMM	Kootwijk, Holland
29.3	KEL	Bolinas, Calif.
30.0	GBL	Leafield
	GBM	Leafield
	NU-2XI	Schenectady, N.Y.
30.2	PCJJ	Eindhoven, Holland
30.6	NAL	Navy Yard, Washington, D.C.
32.0	FL	Riffel Tower
	ANE	Malabar, Java

World List of Short Wave Stations—Continued

Wave-length (Metres)	Call Sig n	Station
	IDO	Rome
	HVA	Hanoi, Fr. Indo China
	VIS	Sydney, N.S.W.
33.0	OCDJ	Issy les Moulins
	OCTN	Mourillon, Toulon
33.5	AQE	S.S. " Sir James Clark Ross "
34.0	NAJ	Great Lakes, Ill.
	XDA	Mexico City, Mex.
35.0	BWW	Gibraltar, N. Front
	BXW	Seletar, Singapore
	BXY	Stonecutters Island, Hong Kong
	BYB	Whitehall, R.C.
	BYC	Horsea
	BYZ	Rinella, Malta
	BZE	Matara, Ceylon
	BZF	Aden
	VKQ	Garden Island, Sydney, N.S.W.
	NPM	Honolulu
	J-IPP	Tokyo
35.03	WQO	Rocky Point, N.Y.
36.0	PCMM	Kootwijk, Holland
	LPZ	Buenos Aires
	OCRB	Rabat, Morocco
36.8	NPM	Honolulu
37.0	PCRR	Kootwijk, Holland
38.0	PCUU	The Hague, Holland
	NU-2XI	Schenectady, N.Y.
39.0	OCMV	Mont Valerien
40.0	NAJ	Great Lakes, Illinois
	NAS	Pensacola, Florida
	NOSU	Coco Solo, Panama
	WNU	New Orleans, La.
40.2	AGC	Nauen
40.5	J-1AA	Iwatsuki, Japan
41.5	OCBA	Bamako, Sudan
41.6	NKF	Bellevue, Anacostia
41.95	FFW	Ste. Assise
42.0	VIS	Sydney, N.S.W.
	VIT	Townsville, Queensland
42.5	TFA	Reykjavik, Iceland
42.98	WIZ	New Brunswick, N.J.
43.0	NPG	San Francisco, Calif.
	JOC	Otchishi, Japan
44.03	WAQ	Newark, N.J.
44.5	SPI	Rio de Janeiro
45.0	NPG	San Francisco, Calif.
46.0	OCMY	Mont. Valerien
	PCLL	Kootwijk, Holland
46.5	TSB	Norwegian s.s. " Helder "

Wave-length (Metres)	Call Sign	Station
47.0	POZ	Nauen
	ICX	Massawa
	SPI	Rio de Janeiro
	SUC2	Abu Zabal, Cairo
49.5	KRP	Salt Lake City, Utah
	TFA	Reykjavik, Iceland
50.0	OCTU	Tunis, La Casbah
	WBZ	Springfield, Mass.
	SAJ	Karlsborg, Sweden
51.0	AIN	Ain Bordja, C'ablanca.
	TSB	Norwegian s.s. " Helder "
51.5	WQN	Rocky Point, N.Y.
	VIS	Sydney, N.S.W.
52.0	VAS	Louisburg, Nova Scotia
	WKK	Ceiba, Porto Rico
	GWG	Vieques, Porto Rico
53.0	ZWT	Bremerhaven
	NPU	Tutuila, Samoa
54.0	NBA	Balboa, Canal Zone
54.4	NKF	Bellevue, Anacostia, D.C.
54.5	WQN	Rocky Point, N.Y.
56.0	GBL	Leafield
	GBM	Leafield
	ANF	Malabar, Java
	NU-1XA0	Belfast, Maine
57.0	OCTN	Mourillon, Toulon
	WQN	Rocky Point, N.Y.
	OCBV	Beyrouth
58.0	KDKA	East Pittsburg, Pa.
58.79	NU-1XA0	Belfast, Maine
60.0	NKF	Bellevue, Anacostia, D.C.
61.0	NKF	South Schenectady, N.Y.
65.5	NU-2XK	East Pittsburg, Pa.
67.0	NU-8XS	Cavite, Philippine Islands
68.0	NPO	San Diego, Calif.
70.5	NQG	Pinecrest, Florida
70.54	WRP	Poinciana, Florida
	WVW	Miami, Florida
70.74	WRB	Bellevue, Anacostia
71.25	NKF	New Brunswick, N.J.
74.0	WIR	Ste. Assise
75.0	F-3GB	Rocky Point, N.Y.
	WGN	Eiffel Tower
	FL	Lakehurst, N.J.
80.0	NEL	Moscow
83.0	RDW	Bellevue, Anacostia
84.0	NKF	Kahuhu, Hawaii
90.0	KIO	Schenectady, N.Y.
100.0	NU-2X1	Schenectady, N.Y.

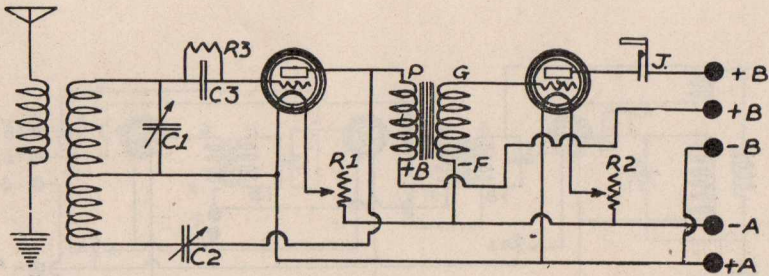
In Advance of N.S. Wales, Victoria, etc.

COMPARISON OF TIME

Behind New South Wales, Victoria, etc.

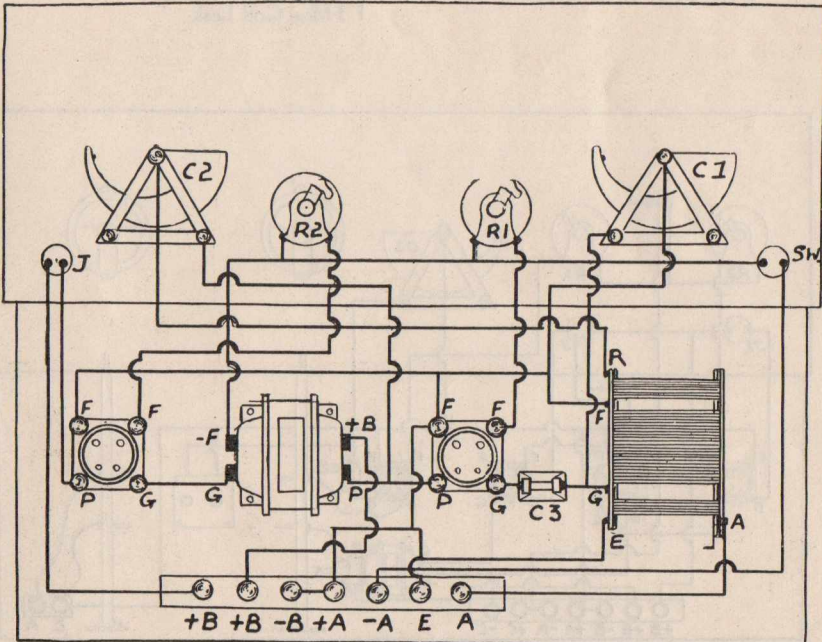
New Zealand	N.S. Wales, Victoria, Queensland, Tasmania	South Australia	Japan	Western Australia, China, Philippines	Central European (Malta, Germany, Switzerland, etc.)	Greenwich Time. (Great Britain, France, Belgium, Gibraltar, etc.)	Argentine	New York, Quebec, Jamaica, Peru	San Francisco, Vancouver
1.30 a.m.	Midn.	11.30 p.m.	11.0 p.m.	10.0 p.m.	3.0 p.m.	2.0 ^o p.m.	10.0 a.m.	9.0 a.m.	6.0 a.m.
1.30 p.m.	Noon	11.30 a.m.	11.0 a.m.	10.0 a.m.	3.0 a.m.	2.0 a.m.	10.0 p.m.	9.0 p.m.	6.0 p.m.
7.30 p.m.	6.0 p.m.	5.30 p.m.	5.0 p.m.	4.0 p.m.	9.0 a.m.	8.0 a.m.	4.0 a.m.	3.0 a.m.	Midn.
8.30 p.m.	7.0 p.m.	6.30 p.m.	6.0 p.m.	5.0 p.m.	10.0 a.m.	9.0 a.m.	5.0 a.m.	4.0 a.m.	1.0 a.m.
9.30 p.m.	8.0 p.m.	7.30 p.m.	7.0 p.m.	6.0 p.m.	11.0 a.m.	10.0 a.m.	6.0 a.m.	5.0 a.m.	2.0 a.m.
10.30 p.m.	9.0 p.m.	8.30 p.m.	8.0 p.m.	7.0 p.m.	Noon	11.0 a.m.	7.0 a.m.	6.0 a.m.	3.0 a.m.
11.30 p.m.	10.0 p.m.	9.30 p.m.	9.0 p.m.	8.0 p.m.	1.0 p.m.	Noon	8.0 a.m.	7.0 a.m.	4.0 a.m.
12.30 a.m.	11.0 p.m.	10.30 p.m.	10.0 p.m.	9.0 p.m.	2.0 p.m.	1.0 p.m.	9.0 a.m.	8.0 a.m.	5.0 a.m.

2 - VALVE REINARTZ RECEIVER



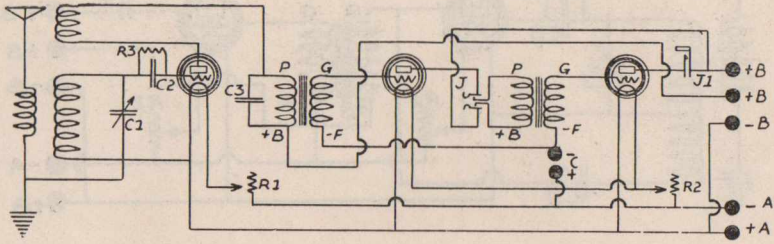
PARTS FOR THE 2-VALVE REINARTZ RECEIVER.

- | | |
|--------------------------------------|----------------------------------|
| 1 Panel 14 x 7 x 3/16 | 1 Emmco S.C. Jack |
| 1 Emmco .0005 Variable Condenser C1 | 1 Emmco Battery Switch |
| 1 Emmco .00025 Variable Condenser C2 | 1 Airzone Reinartz Tuner |
| 2 Emmco Vernier Dials | 1 Terminal Board |
| 1 Emmco 5-1 Audio Transformer | 1 Baseboard, 13 x 9 x 3/4 |
| 2 Emmco Valve Sockets | Busbar, Screws, etc. |
| 2 Emmco 30 Ohms. Rheostats | 1 .00025 Grid Condenser and Leak |



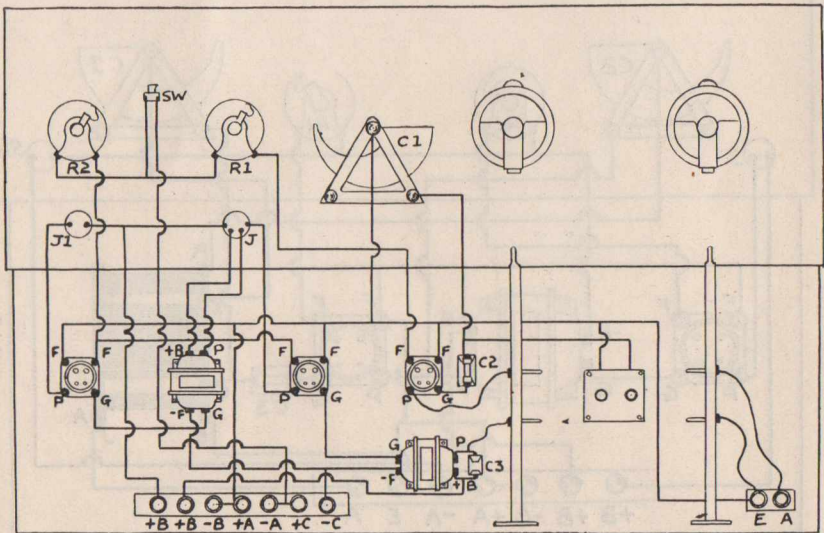
Back Panel Diagram.

3 - VALVE SHORT WAVE RECEIVER



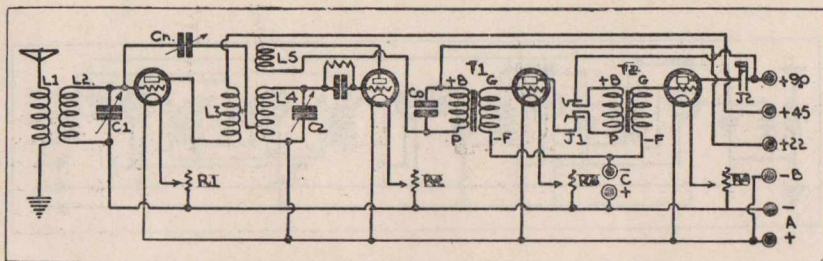
PARTS FOR THE 3-VALVE SHORT WAVE RECEIVER

- | | |
|--|---|
| <ul style="list-style-type: none"> 1 Panel, 18 x 7 x 3/16 1 Emmco .0005 Variable Condenser 1 Emmco Vernier Dial 2 Emmco Back Panel Vernier Dials 2 Pieces of 1/2 in. Bakelite Rod, 9 in. long 1 Rod supporting Back Panel, 6 x 5 x 1/8 1 Emmco 5-1 Audio Transformer 1 Emmco 3 1/2-1 Audio Transformer 2 Emmco 30 Ohms. Rheostats | <ul style="list-style-type: none"> 3 Emmco Valve Sockets 1 Emmco D.C. Jack 1 Emmco S.C. Jack 1 Emmco Battery Switch 1 Kit Short Wave Coils 1 Terminal Board 1 1/4 Baseboard, 17 x 9 x 3/4 Busbars, Screws, etc.† 1 .00025 Grid Condenser 1 3 Meg. Grid Leak |
|--|---|



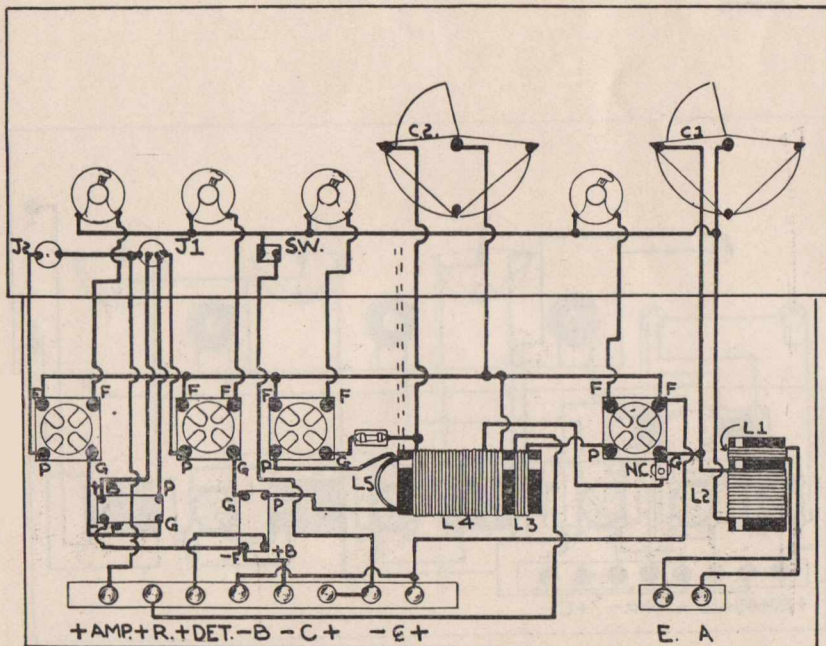
Back Panel Diagram.

BROWNING DRAKE RECEIVER



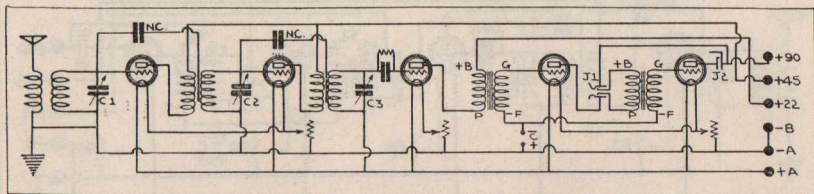
LIST OF PARTS FOR THE BROWNING DRAKE

- | | |
|---|---|
| 1 Panel, 24in. x 3/16in. | 1 .001 Fixed Condenser. |
| 2 .0005 Mfd. Emmco Variable Condensers. | 1 .00025 Fixed Grid Condenser with Clips. |
| 4 30 Ohms. Emmco Rheostats. | 1 2 Meg. Grid Leak. |
| 1 Emmco D.C. Jack. | 1 Neutralizing Condenser. |
| 1 Emmco S.C. Jack. | 8 Terminals on Terminal Board. |
| 1 Emmco Battery Switch. | 2 Terminals on Terminal Board. |
| 2 Emmco Vernier Dials. | 1 Browning Drake Airzone Kit. |
| 4 Emmco Valve Sockets. | 1 Baseboard, 23in. x 9in. x 3/4in. |
| 2 Emmco Audio Frequency Transformers. | |



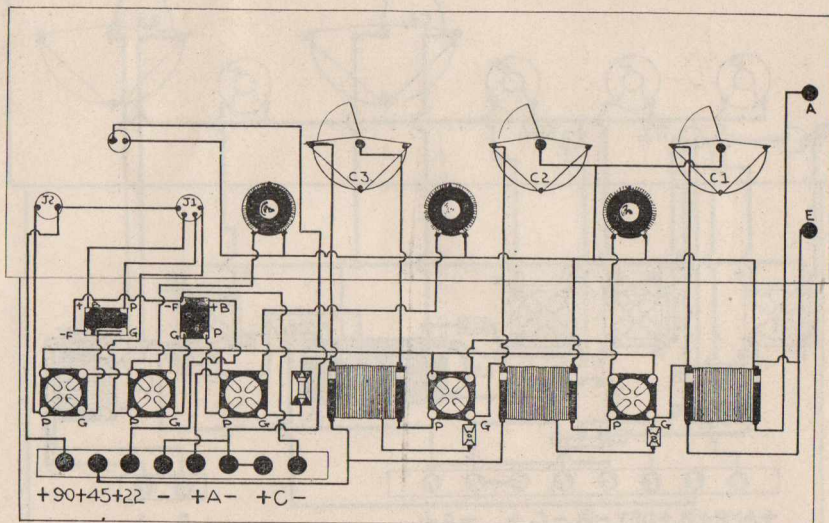
Showing the layout of parts and the wiring for the Browning Drake

A FIVE-VALVE NEUTRODYNE



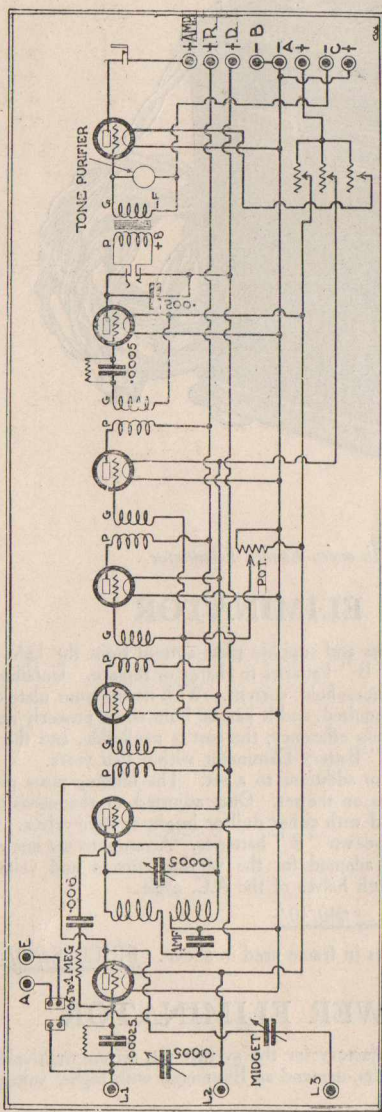
LIST OF PARTS FOR THE NEUTRODYNE SET

- | | |
|---|---|
| 1 Panel, 26in. x 7in. x 3/16in. | 1 .00025 Fixed Grid Condenser with Clips. |
| 3 .0005 Mfd. Emmco Variable Condensers. | 1 3 Meg. Grid Leak. |
| 3 30 Ohms. Emmco Rheostats. | 9 3 Meg. Grid Leak. |
| 1 Emmco D.C. Jack. | 2 Neutralizing Condensers. |
| 1 Emmco S.C. Jack. | 8 Terminals on Terminal Beard. |
| 1 Battery Switch. | 2 Ecs. Sockets and Plugs. |
| 3 Emmco Vernier Dials. | 1 Airzone Neuroformer Kit. |
| 5 Emmco Valve Sockets. | 1 Baseboard, 25in. x 9in. x 3/4in. |
| 2 Emmco Audio Frequency Transformers. | |



Showing the layout of parts and the wiring for the 5-Valve Neutrodyne.

THE EMMCO SUPER-HETERODYNE CIRCUIT



List of Parts for the Emmco Super-Heterodyne Receiver

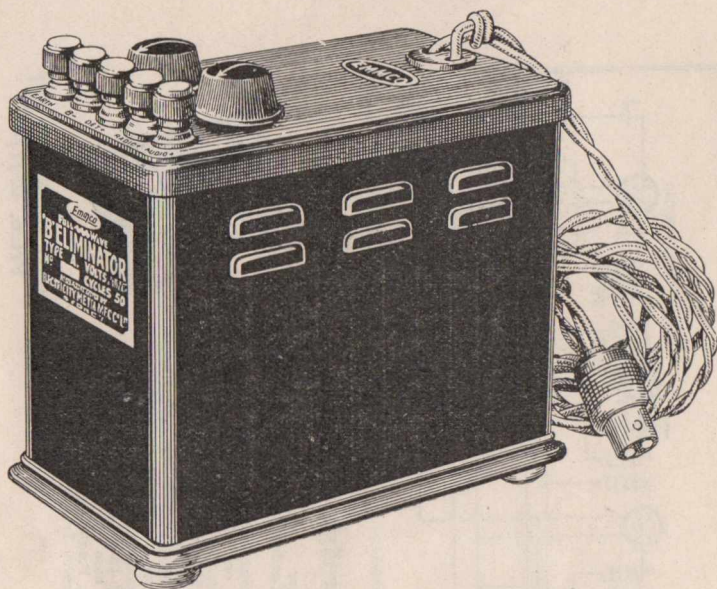
- | | | | |
|---|--------------------------------------|----|--|
| 1 | Bakeite Panel, 24in. x 7in. x 3/16. | 1 | .001 Fixed Condenser |
| 2 | .0005 Mfd. Emmco Variable Condensers | 14 | Brass or Nickel Wood Screws, 1/4in. x 6in. |
| 3 | 6 Ohms. Emmco Rheostats | 8 | Brass or Nickel Wood Screws, 1/4in. x 6in. |
| 1 | 400 Ohms. Emmco Potentiometer | 24 | 2 1/2 ft. lengths of Busbar |
| 1 | Maclurean Tone Purifier | 1 | Emmco Super Heterodyne Kit, comprising: |
| 1 | Midget Condenser for Loop Reaction | 1 | Aerial Coupling with base |
| 1 | Emmco D.C. Jack | 1 | Oscillator Coil with base |
| 1 | Emmco S.C. Jack | 1 | Intermediate Radio Frequency Transformer |
| 1 | Emmco Battery Switch | 1 | Tuned Radio Frequency Transformer (Filter) |
| 2 | Emmco Vernier Dials | | |
| 7 | Emmco Valve Sockets | | |
| 1 | Emmco Audio Frequency Transformer | | |
| 1 | 50,000 Ohms. Resistance and Clips | | |
| 1 | .006 Fixed Condenset | | |
| 1 | 1 Mfd. Fixed Condenser | | |



EMMCO SUPER HET KIT
Price, £7/7/-

With the Emmco Super Het Kit are supplied full size diagrams, blue prints and a book of instructions showing, in simple form, how to build this Receiver. Emmco Super Het Kits consists of Aerial Coupling Coil and Plugs, Three Intermediate Transformers, Filter and Oscillator; all perfectly matched and balanced.





Full Instructions are issued with every Emmco Eliminator.

EMMCO " B " ELIMINATOR

The EMMCO " B " Eliminator replaces " B " batteries and supplies plate current from the light socket. With the EMMCO " B " Eliminator there are no " B " batteries to charge or replace. Unfailing plate current is always available by merely turning on the household current. With its use your plate current never varies or is low, but is always exactly what is required, and it has no hum when properly installed. It keeps the " B " circuit always operating at maximum efficiency, the cost is negligible, and the saving on " B " battery bills will pay for an EMMCO " B " Battery Eliminator within two years.

The EMMCO " B " Eliminator requires no changes or additions to a set. The binding posts provided are simply connected to the corresponding connections on the set. Once adjusted to the needs of your set, it requires no further adjustment. It may be used with either dull or bright emitter valves. It does away with the troubles of run-down or partially run-down " B " batteries. Arrange to see one at your Dealers. Manufactured in Australia, it is specially adapted for the varying current and voltages of Australian electric A.C. lighting mains. It rectifies both halves of the A.C. cycle.

PRICE £10/10/-

Eliminator Kit consisting of Transformer, two chokes in frame used in above. PRICE £4/10/-

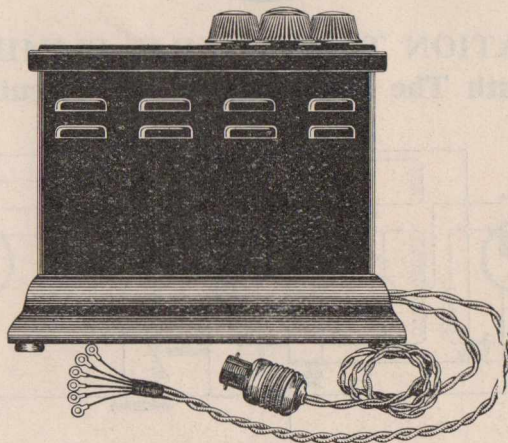
EMMCO SUPER POWER ELIMINATOR

While the EMMCO " B " Battery Eliminator is satisfactory for the average set, certain multivalve sets, especially those using a power valve requiring 180 volts, demand an Eliminator with higher voltage and a greater milliamp output.

The EMMCO SUPER POWER " B " ELIMINATOR meets this demand, giving over twice the output of the regular " B " Battery Eliminator.

PRICE £12/12/-

Eliminator Kit used in above : Transformer, and two Chokes in separate aluminium frames. PRICE £6/10/-



EMMCO A.B.C. ELIMINATOR

To dispense with battery trouble and operate any radio receiving set direct from the house lighting mains is the aim of all radio manufacturers to-day. Electricity Meter Manufacturing Co. Ltd. of Sydney are the first concern to manufacture these high-class units in Australia. It is now possible with the Emmco A.B.C. Eliminator to dispense with the use of all batteries. The unit is simply plugged into the light socket, and clear, non-vibrating power is supplied for filaments, plates and bias with greater improved constant power. Adjustment of the A.B.C. is simple. There are certain fundamental changes necessary in the wiring of the receiver, but these are easily accomplished, and are fully explained in the diagrams on pages 16 and 17. Each instrument is supplied with complete wiring instructions, together with hints for best operation.

Emmco Laboratories have been working for many months perfecting this type of apparatus for Australian conditions. To develop a rectifier of sufficient capacity to carry the current necessary also necessitates the development of a heavy duty filter together with its heavy duty resistance controls.

The Raytheon rectifying valves used will rectify enough current to operate any multivalve set. Not only does it supply the "B" battery current, but it also feeds the filaments and supplies the grid bias. Your total battery cost for the current consumed by an A.B.C. Eliminator will be less than a penny for a full evening's entertainment.

For those who desire to add an extra stage to their set, the EMMCO A.B.C. Eliminator may be obtained with a Power Valve Amplifying Unit, already incorporated in it. This consists of an Audio Transformer, a Valve Socket and a controlling Emmcostad, and the necessary extra tapings from the Power Transformer, all wired complete.

Tapping from the Power Transformer lights the Power Valve from the A.C., without passing through Raytheon Tube.

THE PRICE :

Complete, including B. H. Raytheon Valve for .06 (199 type) Valves	<u>£15 15 0</u>
Same, complete with Amplifying Unit	<u>£17 17 0</u>

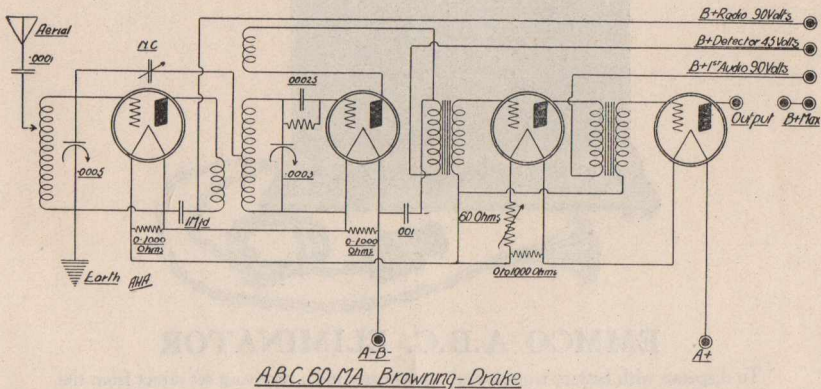
A SUPER POWER EMMCO A.B.C. is manufactured with a special high Outward Transformer for use with .25 (201 "A") type Valves, using the B.A. Raytheon type Tube, and giving a total output of over 300 milliamps at 180 volts.

PRICE :

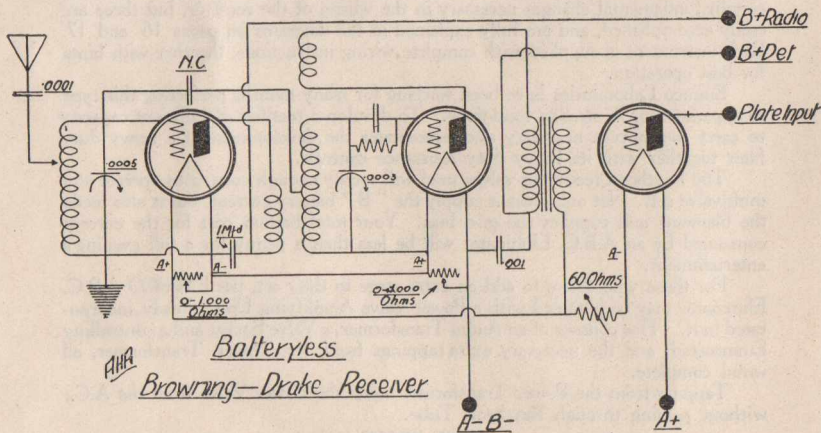
Complete, with B.A. Raytheon Tube	<u>£19 19 0</u>
Same, complete with Power Amplifying Unit	<u>£22 1 0</u>



ADAPTATION TO USE A.B.C. ELIMINATOR with The Browning Drake Circuit



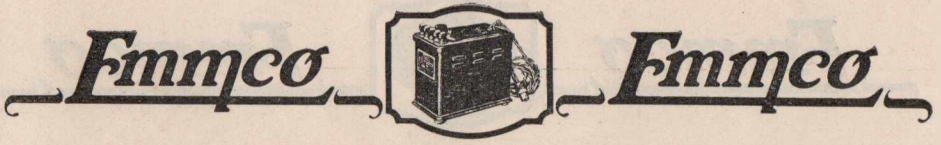
This circuit for use without Power Amplifying Unit.



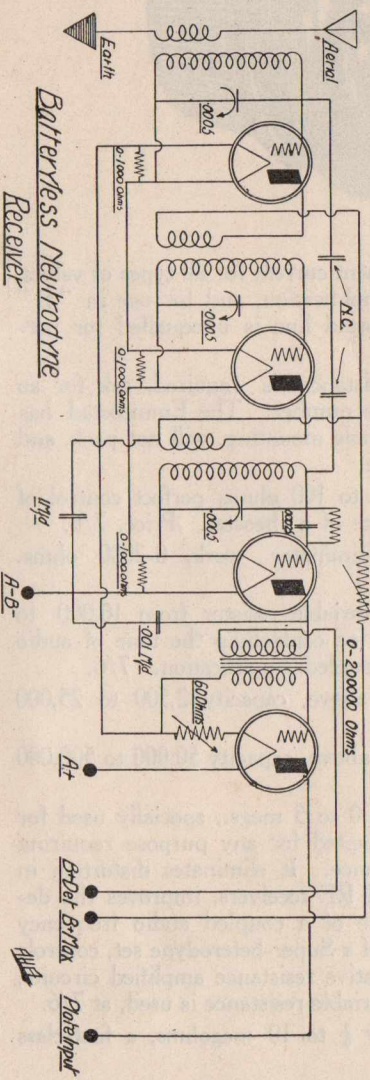
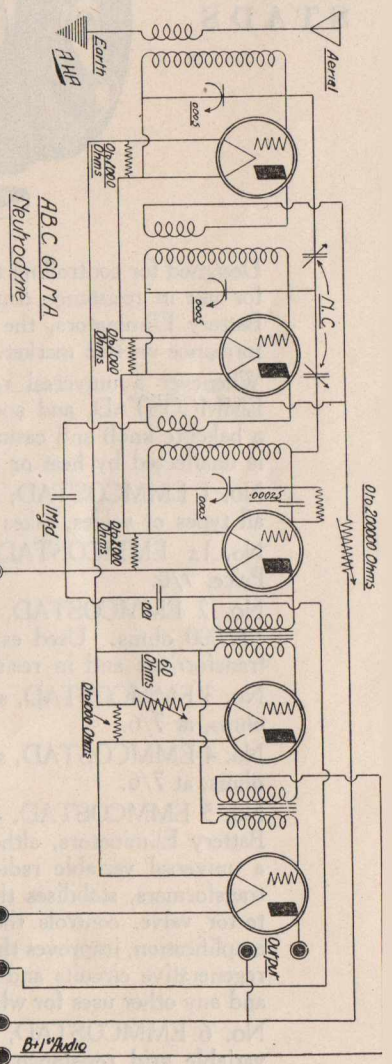
This circuit shows Power Amplifying Unit included in the A.B.C. Eliminator.

The above circuits are shown for the 199 type of A.B.C. Eliminator. If the Super-Power 201A type is used, substitute 400 Ohms. for 1000 Ohms. in the filament circuit.

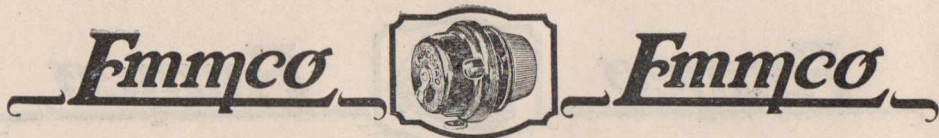
Full instructions and diagrams of adaptation of the A.B.C. Eliminators to other standard circuits are furnished with either style of A.B.C. Eliminator, either with or without Power Amplifying Unit included in the A.B.C. Eliminator.



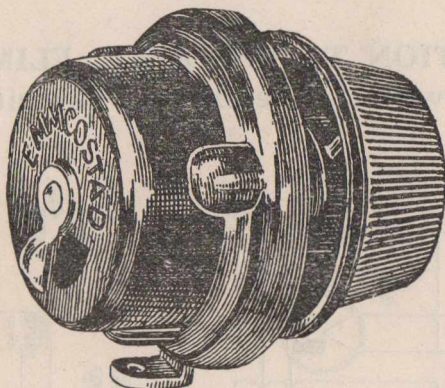
ADAPTATION TO USE A.B.C. ELIMINATOR with the Neutrodyne Circuit



The above circuits are shown for the 199 type of A.B.C. Eliminator. If the Super-Power 201A type is used, substitute 400 Ohms. for 1000 Ohms. in the filament circuit.



EMMCO STADS



Designed for controlling the filament current for all types of valves, for use in resistance coupled amplification, and for use in "B" Battery Eliminators, the Emmcostad line is unequalled for performance on this market.

Whenever a universal radio resistance is required, ask for an EMMCOSTAD, and specify the number. The Emmcostad has a bakelite knob and casing, one hole mounting, will not pack, and is unaffected by heat or moisture.

No. 1 EMMCOSTAD, range $\frac{1}{4}$ to 100 ohms, perfect control of all types of valves, takes the place of a rheostat. Price, 7/6.

No. 1A EMMCOSTAD for Eliminator work, 0-2000 ohms. Price, 7/6.

No. 2 EMMCOSTAD, direct variable resistor from 10,000 to 100,000 ohms. Used especially for controlling the tone of audio transformers and in resistance coupled amplification. 7/6.

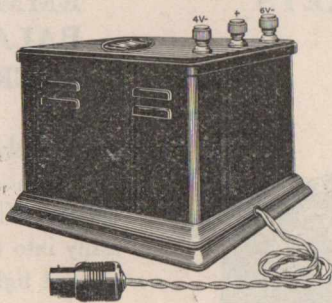
No. 3 EMMCOSTAD, same as above, capacity 2,500 to 25,000 ohms, at 7/6.

No. 4 EMMCOSTAD, same as above, capacity 50,000 to 500,000 ohms, at 7/6.

No. 5 EMMCOSTAD, capacity 0 to 5 megs., specially used for Battery Eliminators, although adapted for any purpose requiring a universal variable radio resistance. It eliminates distortion in transformers, stabilises the tuned RF receivers, improves the detector valve, controls the volume of a coupled audio frequency amplification, improves the tone of a Super-heterodyne set, controls regenerative circuits and regenerative resistance amplified circuits, and any other uses for which a variable resistance is used, at 7/6.

No. 6 EMMCOSTAD, capacity $\frac{1}{4}$ to 10 megohms, a first-class variable grid resistance at 7/6.

Large size POWER STADS, all capacities. 12/6.



“ EMMCO ” BATTERY CHARGER

No Acid No Noise

*Made for A. C. Current only 220/240 Volts,
also for 200/220 Volts.*

Highly efficient, compact, durable, *silent* in operation, and low in first cost. The Emmco Battery Charger replaces, both in price and performance, most of the types which are now on the market. The well-known Raytheon Cartridge is employed ; no valves.

The Emmco Charger is simply plugged into the light socket, the leads of the charger attached to the battery terminals, and, when the current is switched on there is an even flow into the battery, thus ensuring a constant operating potential, and an immunity from periodical and expensive recharging at a service station. The saving in recharging costs alone quickly repays the initial outlay on the charger. Nothing to get out of order. All live elements enclosed in a strong, insulated case. Made in two capacities, both chargers have tappings for charging either four or six volt batteries. Attractive casing, Aluminium base, Bakelite top.

Full Instructions with each Charger.

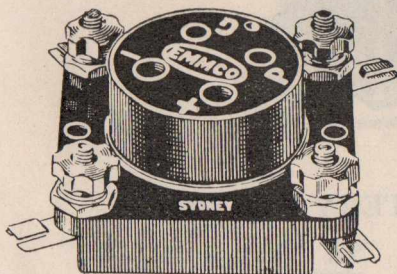
PRICE :

Complete with Cord and Adapter, 2½ amps	<u>£4 15 0</u>
” ” ” ” ” 5 ”	<u>£7 7 0</u>

Will charge any capacity 4 or 6 volt accumulator.



EMMCO SOCKETS



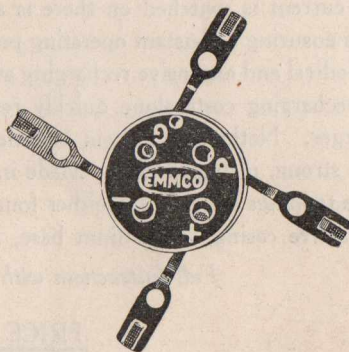
EMMCO BALANCED SOCKET

An entirely new departure in the push type valve socket design. The valve pins fit easily into the socket, and are gripped tightly, thus ensuring positive contact. The natural balance of the socket absorbs any jarring, so that microphonic noises are entirely eliminated. Has both terminals and soldering lugs.

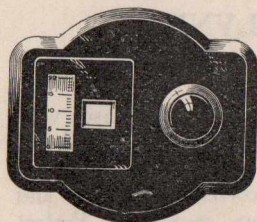
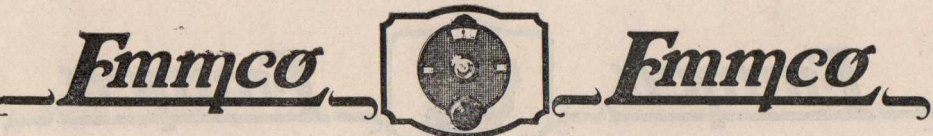
PRICE 3/6

EMMCO SUB-PANEL SOCKET

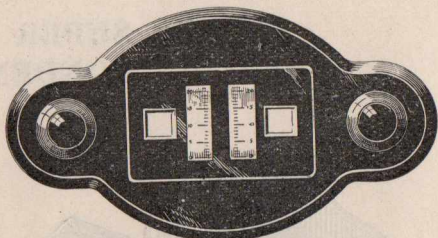
The Emmco Sub-Panel Socket is finished throughout in high grade bakelite, and is easily fixed to the sub-panel. Especially recommended for radio set manufacturers. To the valve pins are fixed four full length extensions, so prepared as to permit the easy soldering of bus bar or flexible leads.



PRICE 2/9



Single Dial Control.



Two Dial Control.

EMMCO DRUM CONTROL CHASSES

EITHER SINGLE OR DOUBLE STYLE

THE EMMCO DRUM CONTROL has been designed and perfected by the Radio Engineers of the Electricity Meter Manufacturing Co. Ltd. after six months' extensive research to overcome the defects common in imported articles of the same nature. The drum controls for the Emmco Stratelene Condensers project through a single opening in the front panel, and each drum contains an indicating strip for calibration purposes. The tuning is a vernier drive, with a separate adjustment for each condenser. The individual condensers are matched, thus providing for properly-balanced tuning control and the most satisfactory distribution of stations.

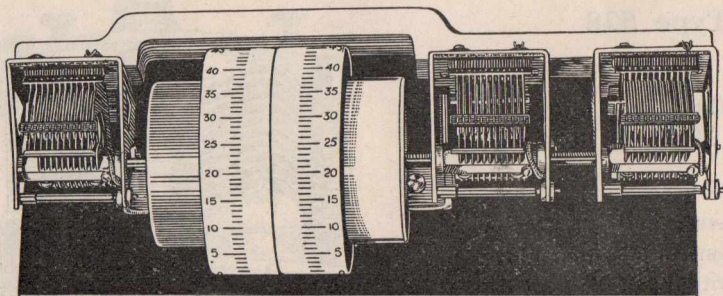
The handsome embossed bakelite face plate ready to be affixed on the face of any type of panel is provided. The condensers are mounted on a strong, rigid chasses, the cone bearings assuring perfect and permanent alignment. Convenient lugs are provided for the easy mounting of coils or the soldering of connections. The templates required are furnished for drilling out the holes for making openings for the drum. The Emmco single or two dial control tuning unit is adapted for use in any circuit, including the Solodyne. Beautifully finished and guaranteed not to get out of order. The most perfect unified control unit yet produced.

PRICE :

For Chassis complete, Mounted with Three Condensers and Bakelite

Dials for Single Control, complete £4 10 0

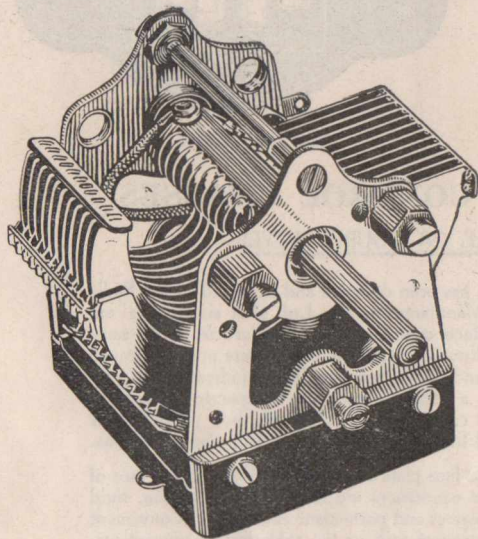
For Double Control, including above, complete £4 10 0



Back Panel View.



EMMCO SUPER STRATELYNE CONDENSER



The improved Condenser, with its cast Bakelite base and improved brass frame, gives absolutely correct minimum and maximum capacities. Perfect insulation, true alignment, easily adjustable brass frame, cutaway brass plates in both Stator and Rotor, pig tailed, and adaptable for either base or panel mounting adjustable cone bearings. The rotor plates are reversible, and can be used for either clockwise or anti-clockwise movement. It has also a hollow quarter-inch shaft interlocking, allowing tandem mounting of two or more condensers, or the substitution of one quarter-inch rod for one dial control sets.

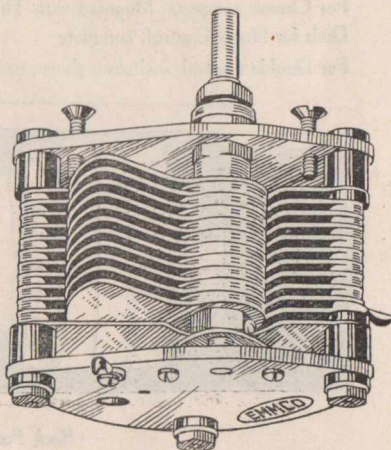
PRICES :

.0005	12/6
.00025 and .00035	12/-

EMMCO S.Q.L. CONDENSER Type 528

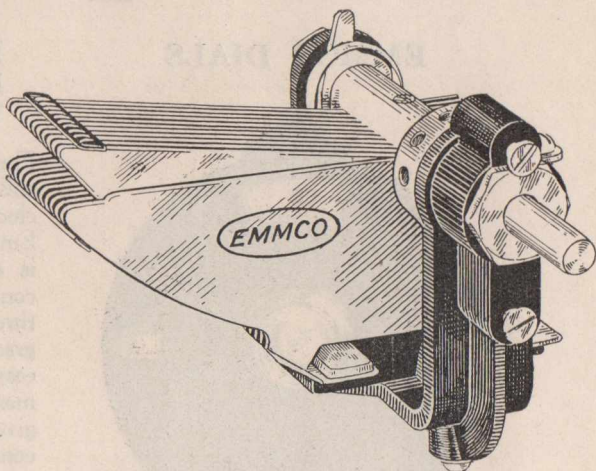
.00025 ..	13/6
.0005 ..	15/-

Aluminium plates ; perfect insulation ; firm, even movement, without backlash. Rigid construction. Used by leading manufacturers.



**EMMCO
DE LUXE
STRAIGHT LINE
FREQUENCY
CONDENSER**

Type 535

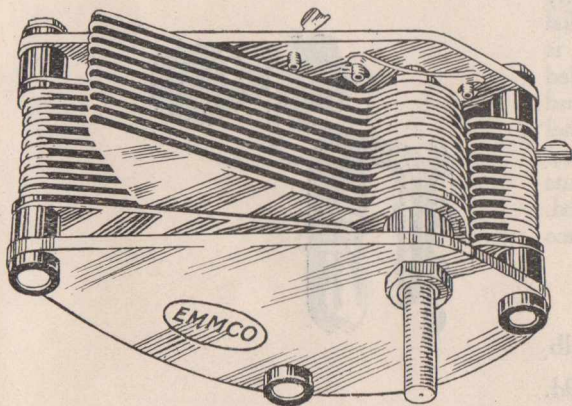


Bakelite moulded frame. Ball-bearing adjustment. Pigtail connection. Can be mounted in three ways—single hole fixing, two-hole, or baseboard mounting. Brass plated and sturdy construction.

PRICES :

.0005	..	25/-
.00035	..	23/6
.00025	..	22/6

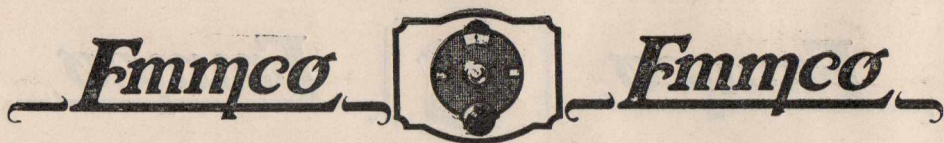
**EMMCO S.L.F. CONDENSER
Type 530**



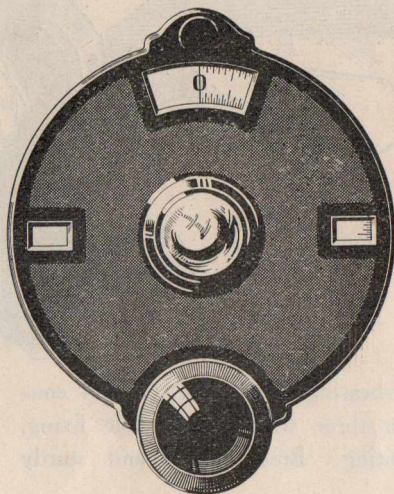
Aluminium Plates. Rugged construction. Ensures ultra-selective tuning.

PRICES :

.0005	..	12/6
.00035	..	12/-
.00025	..	12/-



EMMCO DIALS



EMMCO DIAL ILLUMINATOR

Built especially for bringing out the dial markings in sharp relief, this Dial Illuminator may be conveniently and easily adapted to any illuminated dial now on the market. It is finished in heavily nickelled metal immune from rust, and may be mounted to the panel with a one-hole fixing. A snap of the knob to left or right cuts on or off the bulb as required. Especially adapted for Emmco Dials.

PRICE 4/6

Complete with switch and bulb.
Bulbs only for Illuminator, 9d.

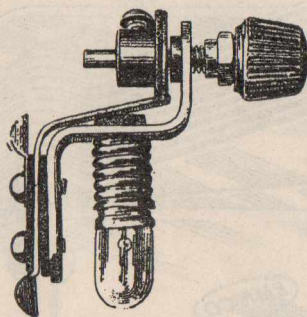
EMMCO DE LUXE VERNIER DIAL

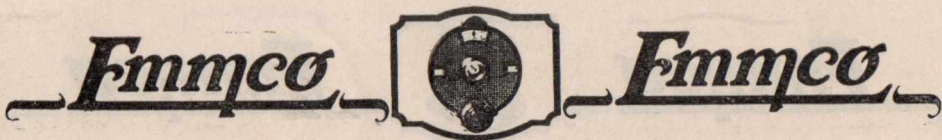
Finished in black or mahogany, and with clockwise or anti-clockwise movement, the Emmco De Luxe Vernier Dial is at the same time of solid construction, being finished throughout of lustrous high-grade bakelite. It possesses an easy, yet firm, vernier movement without jerkiness, and gives a steady, non-slip tuning control over the whole scale.

A feature of the dial is that its special construction eliminates hand capacity. In the logging windows may be written the call sign of the stations heard, so that a station once heard may be returned to again at any time without searching. Hair line adjustment and easy mounting.

PRICE 9/6

Illuminated, 13/6

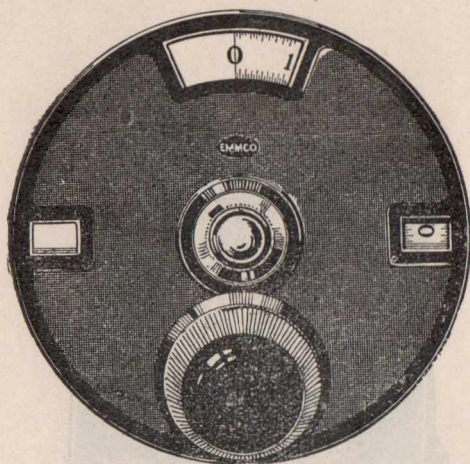




EMMCO DIALS

EMMCO VERNIER DIAL

This is a standard bakelite Dial of which over 100,000 are now in use throughout Australia. Logging windows to left and right. Hair line adjustment, easy mounting, accurate tuning. Absolutely no back lash. Finished in black or mahogany, clockwise or anti-clockwise movement.

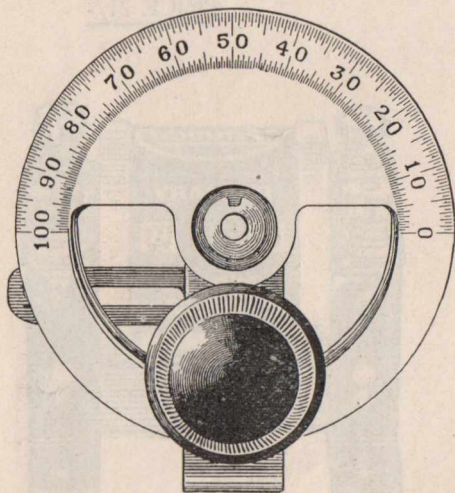


PRICE 7/6

Bakelite Frame, 7/6
Black or Mahogany Finish

Knobs, as used on Dials, Plain or Arrowed, Black or Mahogany, 1/-

EMMCO BACK PANEL DIAL



Many of the modern receivers embody back panel dials which show the projection of only one small knob through the front of the panel. The Emmco Back Panel Dial is supplied with a lustrous white bezel. Template and instructions furnished with every dial. Black bakelite knob. Vernier movement without slippage or back lash. Accurate tuning. Especially adapted for illumination.

COMPLETE WITH BEZEL

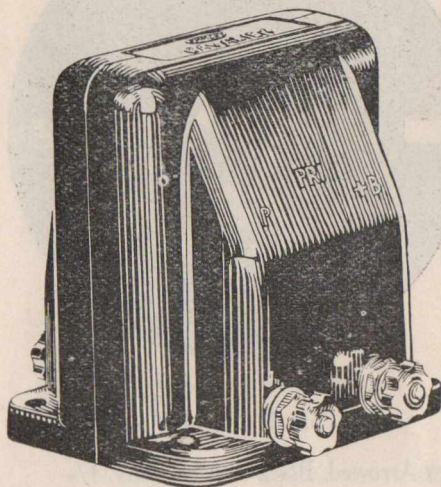
PRICE 5/6

Same Dial with Illuminator, complete with switch and bulb,

10/-



CAVALIER TRANSFORMER



The Cavalier Transformer represents the last word in audio frequency transformers. It has an extremely high amplification factor, truly separating all notes throughout the musical register at either high or low frequencies without distortion. Terminals placed at base ensure easy wiring. The moulded bakelite case is finished in a deep brown, and its construction eliminates the possibility of moisture permeating to the inside windings. Over 18,000 turns of high grade enamelled wire in each transformer. Shielded core, perfectly insulated windings, and solid construction.
Ratios : 2-1, 3½-1, and 5-1.

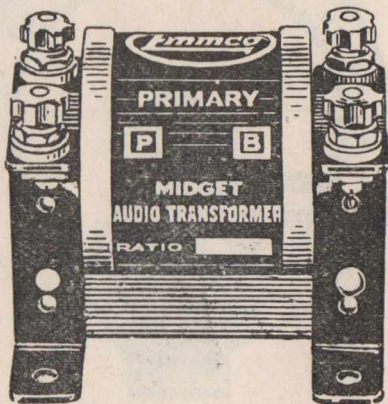
PRICE 21/-

EMMCO MIDGET TRANSFORMER

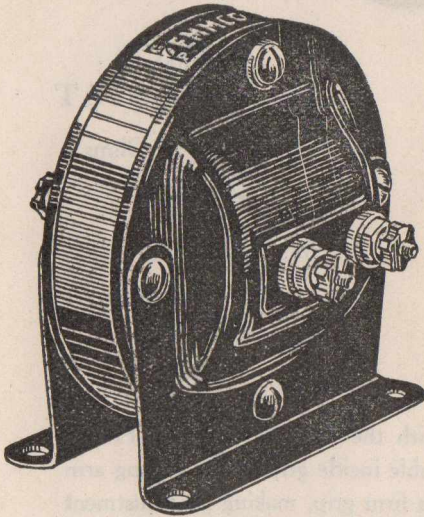
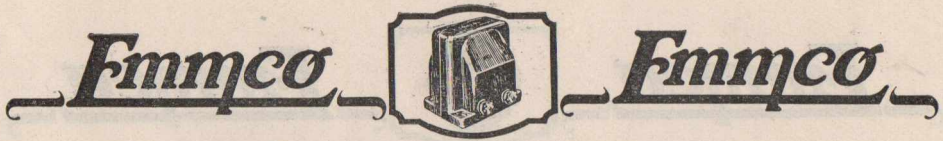
The Emmco Midget Transformer answers the requirements of all those who are seeking for an audio transformer with high efficiency, but low price. The Midget has a shielded core, perfectly insulated windings, and an attractive appearance. Especially recommended for use by radio set manufacturers.

Ratios : 2-1, 3½-1, and 5-1.

PRICE 13/9



*All Emmco Transformers are
guaranteed.*



EMMCO TRANSFORMER

PRICE 17/6

Ratios 2 to 1 $3\frac{1}{2}$ to 1
5 to 1 $7\frac{1}{2}$ to 1

EMMCO PUSH PULL TRANSFORMERS

63/- Pair

Designed and manufactured to the highest possible degree of electrical and engineering efficiency.

Amplifies music and speech without any of the distortion so frequently met with in other types. Guaranteed not to burn out.

EMMCO AUDIO CHOKE

10, 20, 50 and 100
Henries

PRICE 21/-

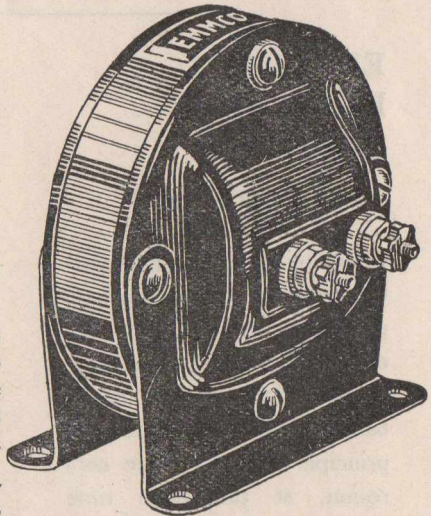
The Choke Amplifier shows maximum purity of speech and music.

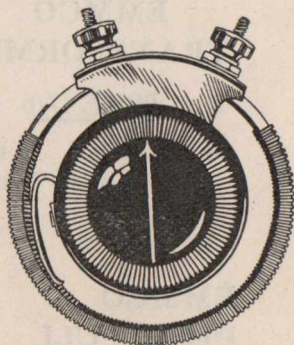
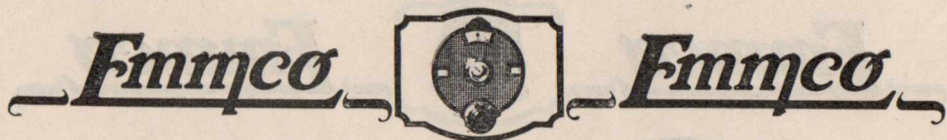
The Emmco Audio Choke is produced in a similar casing to the Transformer, and may be used in place of transformers in all audio frequency circuits.

The B.B. Eliminator Kits, consisting of Transformer, two Chokes in frame as used in the Emmco B. Battery Eliminator.

PRICE £4/10/-

Kit used in Super Power Eliminator, Transformer, and two Chokes, in separate aluminium frames, £6/10/-.





EMMCO RHEOSTAT

6, 10, 20, 30 Ohms.

PRICE 3/6

POTENTIOMETERS

in the same style,

400 Ohms

4/6

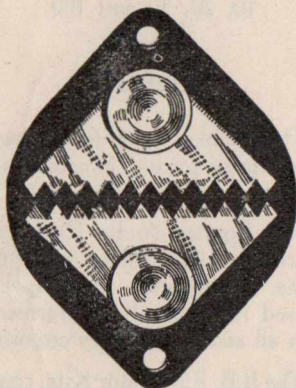
This Rheostat is constructed with the New Style Metal Frame, with a Bakelite Knob. The double inside grip of the sliding arm ensures continuous contact and a firm grip, making its adjustment even and sure the whole way round. Impossible to lose its adjustment. Air cooled, low loss.

Knobs, Black or Mahogany, Plain or Arrowed, 1/-.

EMMCO LIGHTNING ARRESTER

PRICE 2/6

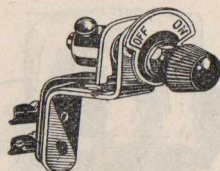
A Lightning Arrester is a positive necessity for the adequate protection of any Radio Receiver. The Emmco Lightning Arrester is mounted on a bakelite base, and the gap principle prevents static corrosion, at the same time affording an easy path to earth for heavy static discharges.



An Insurance Policy is issued with each arrester, guaranteeing to replace any damage by lightning to the extent of £25.

EMMCO BATTERY SWITCH

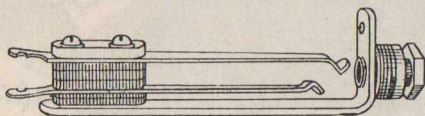
A neat little device which is adapted to all valve receivers. It is fixed with a one-hole mounting to the panel, and with one movement of the knob automatically cuts off or cuts on the filament current to the valves, thus obviating the necessity of disconnecting the battery leads from the set.



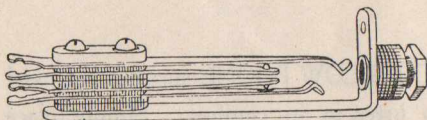
PRICE 2/6

EMMCO JACKS

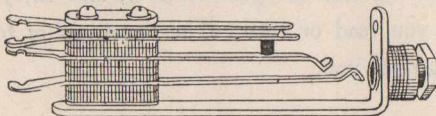
Nickel plated, silver contact points, separate frame, and easily accessible. Tinned soldering lugs. Spacing washers are provided for panels from $\frac{1}{8}$ in. to $\frac{1}{2}$ in. thick.



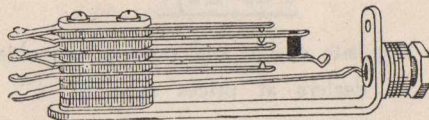
500 OPEN CIRCUIT JACK.
PRICE 2/6



502 DOUBLE CIRCUIT JACK.
PRICE 3/-

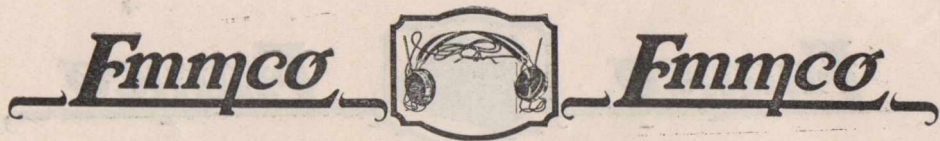


503 SINGLE FILAMENT JACK.
PRICE 3/6

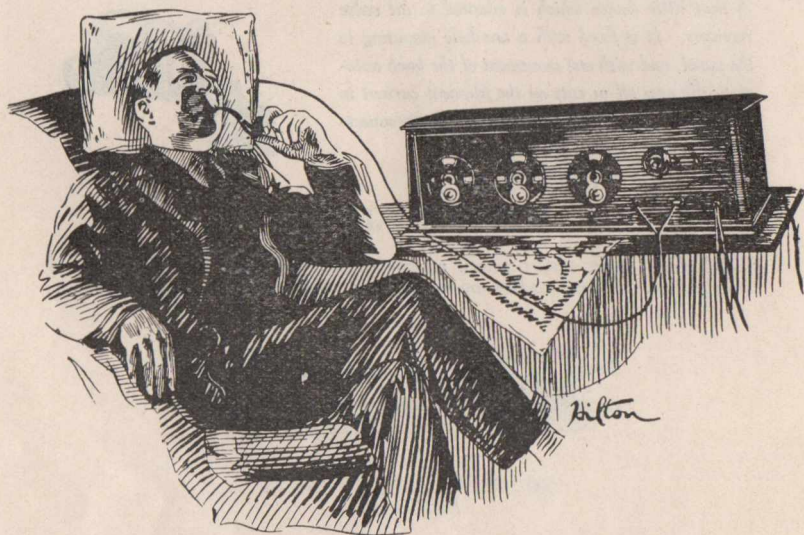


504 DOUBLE FILAMENT JACK.
PRICE 3/9

Phone and Speaker Tip Jacks, nickel plated, one hole mount, soldering lugs, positive contact. PER PAIR, 2/-



EMMCO PILLOW PHONE



THE EMMCO PILLOW PHONE supplies the need of all those who desire to listen-in in comfort. Simply place the Pillow Phone, fitted with its Emmco Unit, in the place of your favourite cushion, attach the leads to your receiver, and enjoy the broadcasting while you read or rest. The sweetness of tone and the volume will surprise you.

THE EMMCO PILLOW PHONE is supplied without cover

For 21/-

but covers in exquisite design and material are obtainable from dealers at prices ranging

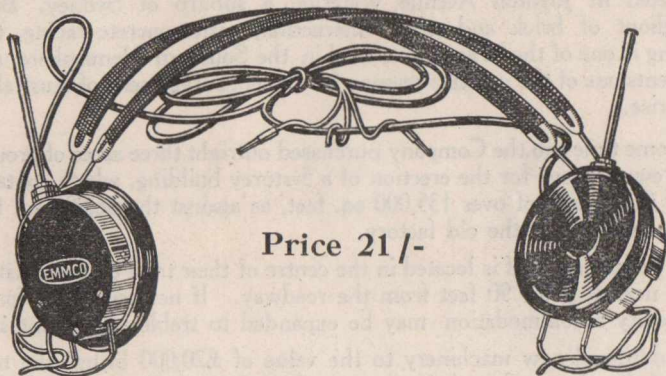
From 4/6 to 21/-

Emmco



Emmco

EMMCO HEADPHONES



Price 21/-

Every detail in these Headphones is manufactured to the highest standard of efficiency. A light spring head band, with sliding adjustment, on each earpiece, enables them to be worn with the utmost comfort.

A special ear vent on each bakelite cap allows for proper ventilation while the phones are being worn. These phones are more than equal to higher-priced imported headphones.

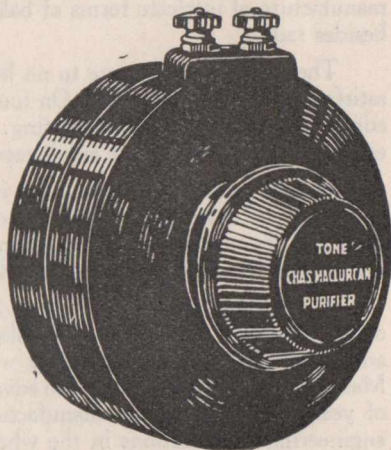
Guaranteed for one year against mechanical defects.

MACLURCAN TONE PURIFIER

As a Tone Purifier and Static Reducer the Maclurcan Tone Purifier has no equal on the market. Even the poorest receiver, with its harsh reproduction, can be converted into a mellow-toned, musical instrument.

The fitting of this Purifier is simplicity itself. It may be adapted to any set, and static trouble may be greatly reduced. The Maclurcan Tone Purifier is particularly useful in reducing interference from near-by electrical machinery, electric light mains, transformers, etc.

PRICE 21/-



EMMCO'S PROGRESS

BRICK by brick, and stone by stone, rearing its head high into the air, the colossal new building, housing the plant and employees of Electricity Meter Manufacturing Company Ltd., has just been completed in Joynton Avenue, Waterloo, a suburb of Sydney. Built throughout of brick and steel construction, with concrete facing, this building is one of the largest of its kind in the Southern Hemisphere, and represents one of the greatest reasons for the encouragement of Australian enterprise.

Some time ago the Company purchased outright three acres of ground and drew up plans for the erection of a 5-storey building, which contains a total floor space of over 135,000 sq. feet, as against the 36,000 sq. feet space comprised in the old factory.

The factory itself is located in the centre of their tract of land, distant at the nearest point 90 feet from the roadway. If necessity calls for it, the factory accommodation may be expanded to treble its present size.

Additional new machinery to the value of £20,000 brings the total value of the plant and equipment up to the enormous figure of £200,000, and it is estimated that the number of constantly-employed Australian workers now numbering 650 will shortly be increased to over 1,000.

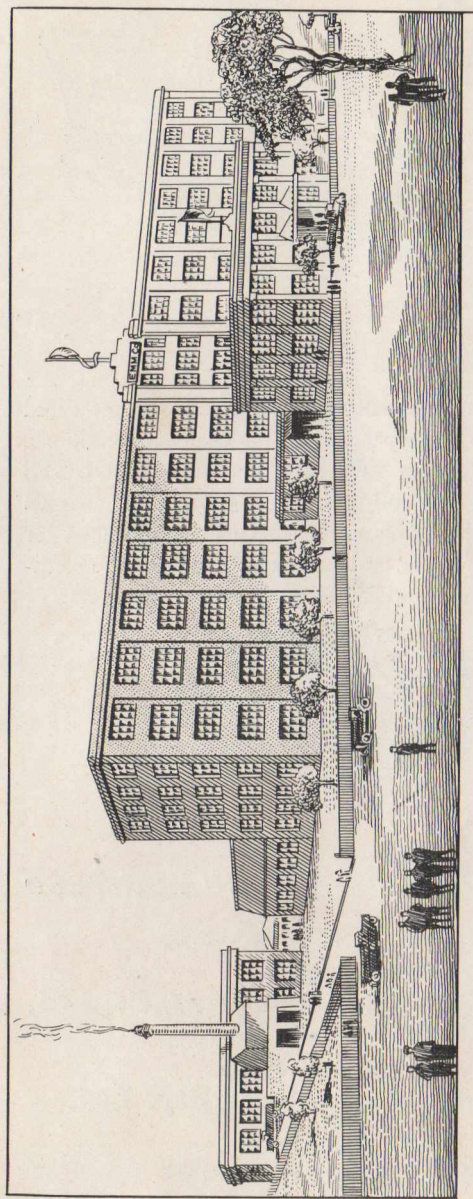
Amongst the separate industries fostered and carried on in this vast enterprise are represented many types of apparatus, the names of which are household words in Australia to-day. Under a variety of headings, the main ones may be listed as follows:—Electric Refrigerators, Radio Parts, Petrol Pumps, Electricity Meters, Magnetos, House Lighting Plant, fractional Horse-power Motors, Motor Car Accessories for Motor Car Electrical Equipment, and Bakelite Products in all forms.

Without exception, the demand for every one of these products is increasing at a rapid rate, and it may be mentioned that the bakelite plant in particular is being duplicated, and that the Company is also installing an up-to-date double action hydraulic bakelite press, allowing for the manufacture of intricate forms of bakelite work, including other products besides radio.

The Company has gone to no little trouble to ensure the health and satisfaction of its employees. On four sides the high steel frame windows admit of unlimited natural lighting. An up-to-date cafeteria will cater especially for the needs of employees.

Special pains have been taken in the Radio Manufacturing Section to ensure an uninterrupted output of the well-known standard Emmco lines, besides ample space and equipment for research and testing purposes for new parts which the Company always has in course of production.

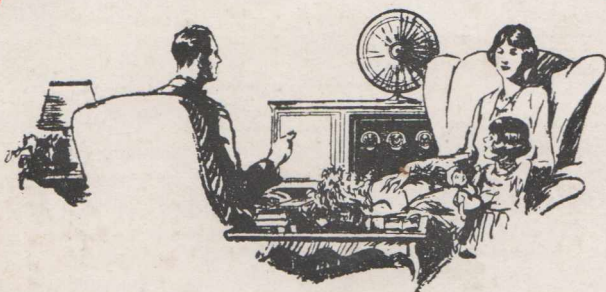
The factory stands not only as an attractive landmark in the midst of a commercial community, but also as a monument to the enterprise and aggressive commercial policy which has enabled Electricity Meter Manufacturing Company Ltd. to advance in a comparatively short number of years from an obscure manufacturing concern to one of the biggest engineering organizations in the whole empire.



EMMCO'S NEW HOME

THE magnificent plant housing the entire production activities of Electricity Meter Manufacturing Company Ltd., Waterloo, Sydney.

Executive Offices in the Building in front of Main Factory.
Foundry beyond it in the left at rear.



Value

THE value of a commodity is its definite worth measured in the terms of proper service under given conditions. For several years EMMCO RADIO PRODUCTS have rendered efficient and economical service to thousands of radio enthusiasts. This performance has established for EMMCO a known value, and has gained for them the confidence of Buyers and Builders of Radio Receivers.

Emmco

RADIO PRODUCTS

EMMCO PRODUCTS ARE GUARANTEED

FOR SALE AT ALL DEALERS

Manufactured by

Electricity Meter Manufacturing Co. Ltd.
WATERLOO - - SYDNEY

Sole Selling Agents to the Trade :

Manufacturers' Products Pty. Ltd.

H. J. Hapgood

CHALLIS HOUSE - SYDNEY