

AUSTRALIAN TELEGRAPH KEYS AND INSTRUMENTS

By Ron McMullen former Telegraphist, Telegraph Supervisor, Senior Postal Clerk, Instructor and Postmaster in the Australian P.M.G. Department.

The first telegraph line in Australia was opened in 1854 between Melbourne and Williamstown, Victoria. The telegraph quickly spread to all colonies and prior to Federation in 1901 each colony was responsible for its own telegraph system and equipment was obtained from overseas countries, mainly England and the United States. Hence the variety of equipment now found.

After Federation the Commonwealth Government took over responsibility for Postal and Telegraph services and much of the equipment was obtained locally. Indeed a lot was made in the Postmaster-General's Department's workshops.

Morse code and the telegraph continued as the main means of communication until it was phased out during the 1960's with the last telegram being sent by Morse between Roebourne and Wittenoon Gorge, Western Australia in 1968.

PMG Department:

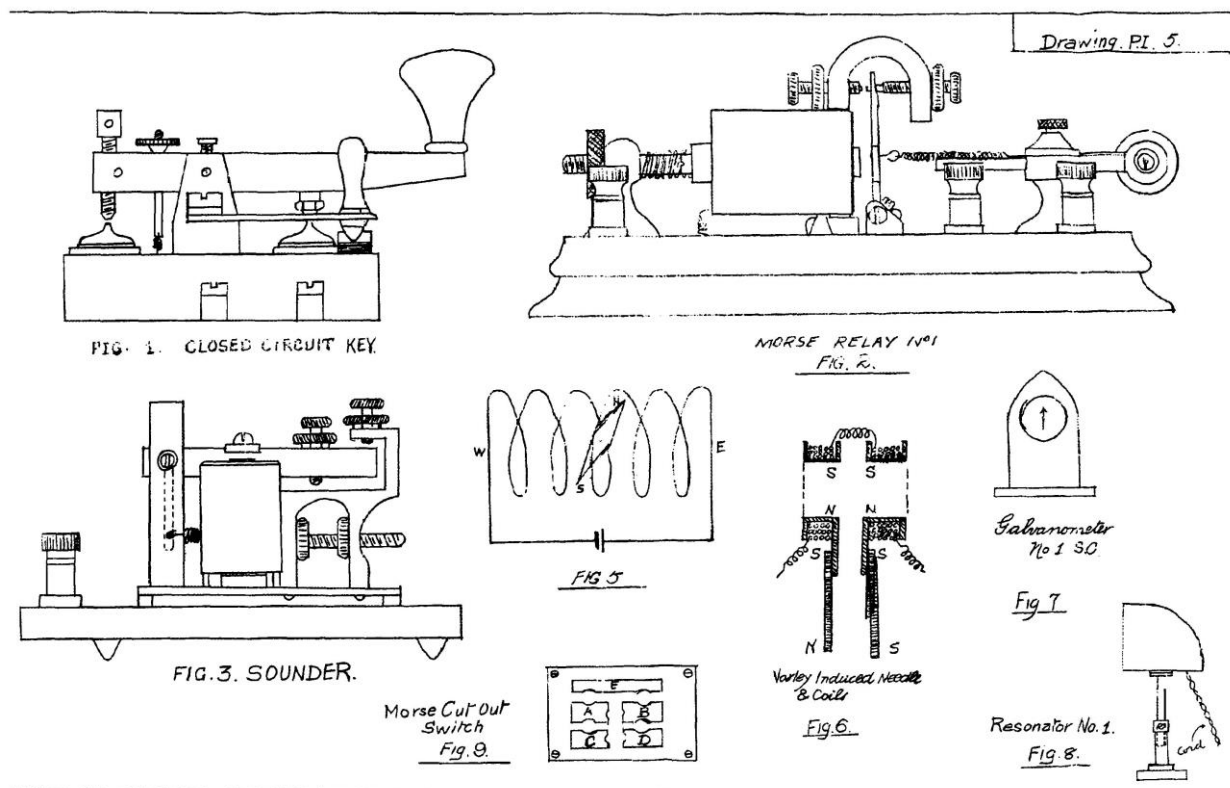
Pride of place in Australian keys must go to the well-known 'PMG' (Postmaster-General's Department) key. This was originally made of all brass fittings, gutta-percha knobs and a wooden base. In the 1930s the wooden base and knob were replaced with Bakelite and the fittings made of steel. Both came in 2 and 3 terminal models, with circuit closers for closed circuit working and 2 and 3 terminal models, without circuit closers for open circuit working.

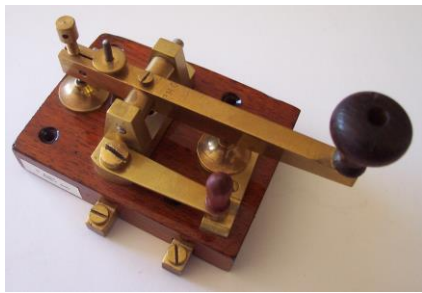
They were particularly well made and could take plenty of 'pounding'.

After the Second World War the Postal Workshops Melbourne converted WT8AMP keys by mounting the key on the standard sized PMG bakelite base, replacing the arm with a longer one, and adding a circuit closer.

The Department also made its own relays, sounders, resonator boxes, line switches, switchboards and other testing equipment.

The PMG Department made a portable telegraph set for use at sporting events and locations where temporary facilities were required. It was a very well constructed dovetailed wooden box containing normal issue key, sounder and relay.





Early P.M.G. 2 terminal brass key.



Early P.M.G. 3 terminal brass key.



Later P.M.G. 2 terminal key.



P.M.G. Workshops modified WT8amp key.
(Square corner model)



P.M.G. Workshops modified WT8amp key.
(Round corner model)



P.M.G. Portable set.



P.M.G. Portable set
(key, relay and sounder). Pre set up.



P.M.G. Portable set in operating position.



P.M.G. Drop indicator.



P.M.G. 5 Bar switch.
(Used mainly in N.S.W.)



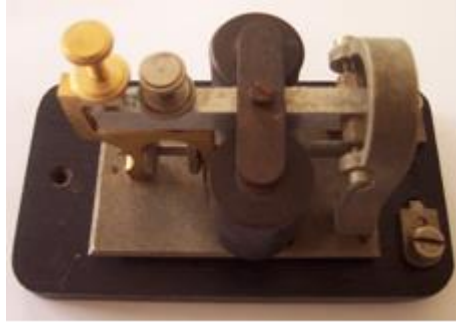
P.M.G. Section switch.
(Used mainly in Victoria)



P.M.G. 2 way switch.



P.M.G. 900 Ohm sounder.



P.M.G. 20 Ohm sounder.



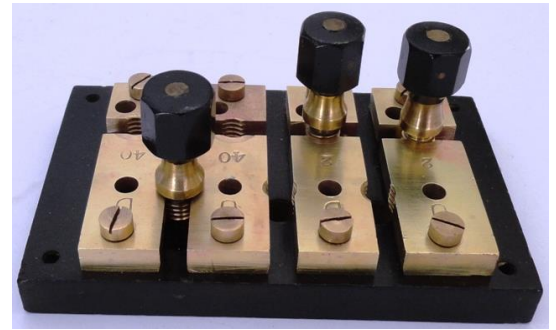
P.M.G. Polarised relay.



P.M.G. 2 Pole 3 position battery switch.



P.M.G. Reversing switch.



P.M.G. 2 Line switch.



P.M.G. Differential Millammeter.



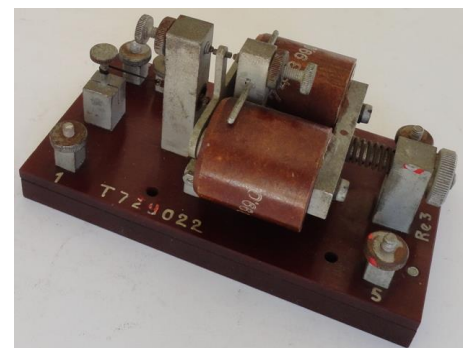
P.M.G. Box Trembler bell.



P.M.G. Millammeter.



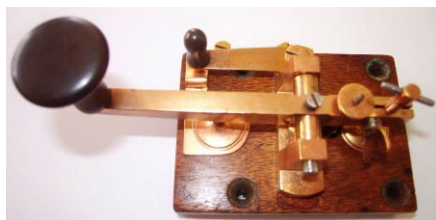
P.M.G. Queensland Resonator and Sounder.



Miniature relay.

New South Wales Railways:

The New South Wales Government Railways made their own keys at their Eveleigh Workshops, Sydney. They were almost an exact copy of the PMG straight key with the exceptions that the backstop adjustment screw carried a cross bar and the side screw to tighten the back stop adjustment screw was of the 'butterfly' type. They were made with circuit closers and some minus the circuit closer with a plastic plug in place of the securing bolt. Sydney Tramways also used Morse code and as they were State Government owned perhaps railway keys were used there. Victorian Railways used a very similar key.

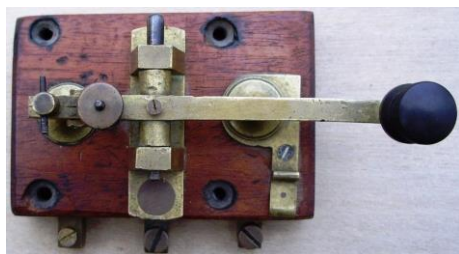


N.S.W. Government Railways keys.



N.S.W. Government Railways resonator box.

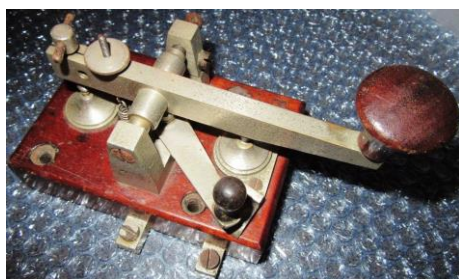
Victorian Railways:



Victorian Railways key.



Sliding switch.



This key is stamped Vic RYS 858 on base.

Hooker:

Little is known of this brand. They either produced or were agents for at least two types of key similar to a PMG key. One two terminal and one 3 terminal.



Hooker 2 terminal.



Hooker Sydney logo.



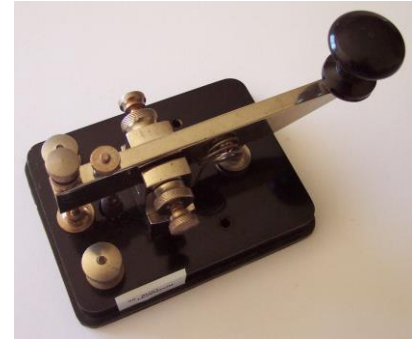
Hooker 3 terminal.

Levenson:

Levenson's was a well-known Radio Shop located at 226 Pitt Street Sydney up to the 1950's. It was largely a family run business headed by Joe Levenson. They manufactured mainly cheap goods and practice type morse keys. The range consisted of 'Like-A-Flash' Morse code keys and sets. They sold three basic straight keys – the No.1 with long or short arms and plated fittings mounted on a bakelite moulded base, 3¼" x 2¾" x ½" and in 1941 priced at 12/6.

Their No. 2 key was described as a 'PMG type' with plated fittings mounted on a wooden base, 4¼" x 3" x 15/16" and priced at 19/6. These keys would not have been used by the PMG Department.

The third key was described as a 'Junior De Luxe' key with chromed fittings on a wooden base and again in 1941 priced at 7/11.



Levenson No. 1 key.

Levenson's also sold a 'PMG' type sounder priced at 35/-. All keys were marketed in a variety of combinations with buzzers, sounders, oscillators, lamps, batteries etc.

During and after World War 2, Levenson's sold a semi automatic key, 'jigger', obviously made by Buzza complete with holes for the Buzza label, but with 'Like A Flash' and Levenson decals substituted for the Buzza label. It is likely that these were obtained from the Buzza distributors Gulterman and King.



Levenson No. 2 key.



Early Levenson keys.



Levenson semi auto label.



Levenson 'Like A Flash' semi automatic key
(Almost certainly made by Buzza).



Levenson 'Like A Flash' series practice key.

Buzza Products:

Buzza Products, Sydney made a variety of keys, from simple learner sets to a very good semi automatic key. Various components such as buzzers oscillators etc. were made and these found their way into many different set arrangements. Their brass key was something similar to the PMG brass key, but without a circuit closer and a couple of other minor parts. They were not particularly well made. A popular model was the Boy Scout 'Doodlebug'.

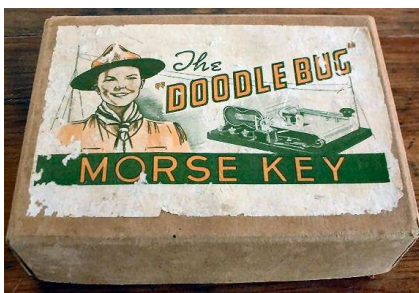


During World War 2 a Bunnell 'triumph' type key was made with 'Buzza Products Sydney' embossed on the trunion section. These were made for US forces in Australia as was the J36. The Buzza 100 came in a double lever style with a 'T' damper post and also a single lever style with a 'bridge' damper style similar to the Lightning and the Levenson. Given the similarity between the Levenson, J36 and Buzza 100, it seems there was a connection between Levenson and Buzza most likely via the distributor Gulterman and King.

The J36 was made for the US Signal Corp during World War 2. They were made by Buzza Products, Sydney as they appear to be exactly the same as the single lever Buzza 100. The label, which is similar in design and layout to the Buzza 100 reads 'J36 AUTOMATIC KEY SIGNAL CORP. U.S.A. MADE IN AUSTRALIA'.



Buzza Practice sets.



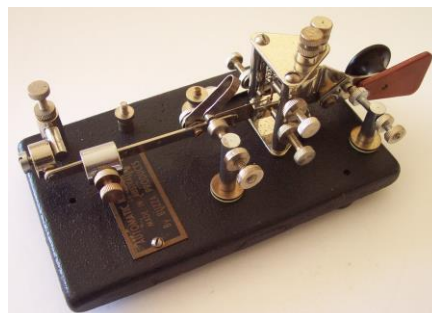
Buzza Doodlebug Boy Scout key.



Buzza straight key.



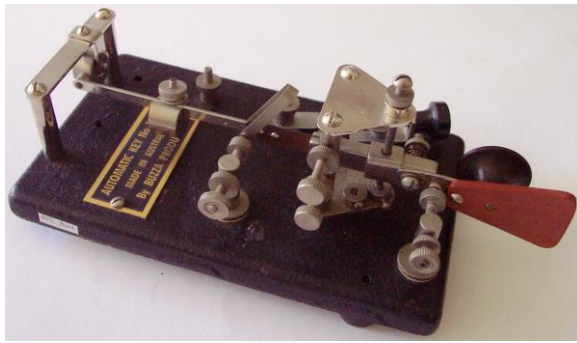
Buzza U.S. design straight key.



Buzza Double pivot semi auto key.



Buzza Single pivot semi auto key.



Buzza single pivot (lightning type).



Label on Lightning type made for U.S. Signal Corp.

A.W.A.:

A.W.A. (Amalgamated Wireless Australasia) made a variety of keys, sounders and possibly relays mainly for the Defence Forces before and during World War 2. Possibly the most common is the WT8AMP key, and this was included in radio sets in a variety of configurations.



An early 1900s Marconi Telefunken System radio key made by A.W.A.



A.W.A. R688B. A similar key was made by Cinema Engineering P/L. The label read 'Type Like R688B Manipulating Key Cinema Engineering Pty Ltd'. The knob was embossed 2018 A2-14. Similar key also made by A.V. Sales Pty. Ltd.



A.W.A. army radio key.



A.W.A. W.T. 8 AMP key.



Early A.W.A. Spark key.



A.W.A. Transmitter 1930s.



A.W.A. No 97/5230

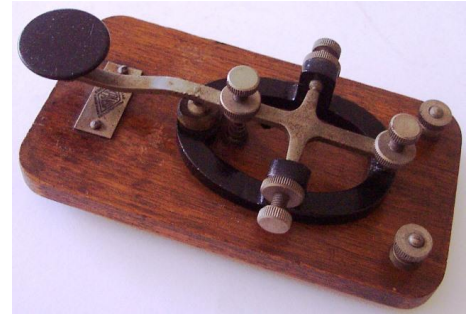
A.W.A. Radio Key. Based on UK key. Plate on front of base reads AMALGAMATED WIRELESS (A/sia) LTD No 97/2135 SYDNEY. N.S.W. Attachment reads 250V 1870 MADE IN SWEDEN - 40 TO + 85oC. 2μF Rifa in circle.



AWA sounder



EXPANSE keys made by A.W.A.



Bathtub:

Bathtub keys were made by both Radio Corporation and its subsidiary Eclipse Radio. They were black and can be identified by the IOA/ lettering prefix and the absence of a number on the inside of the lower section.



Australian 'Bathtub' key.



Australian 'Bathtub' maker's boxes.

Clipsal:

Clipsal keys were made by Gerard Industries, Park Terrace, Bowden, South Australia for the Defence forces during World War 2 and manufacture continued after the war when they became popular keys for amateur radio operators. Clipsals were made in two and three terminal models and the firm also made WT8AMP keys. They are often incorrectly referred to as PMG keys. They did not have circuit closers and the terminals were on the opposite side. Most had brass fittings, but some also had steel fittings. A few however were used on PMG radio circuits.



Clipsal 2 terminal key.



Clipsal 3 terminal key.

Blue Point:

Blue Point keys were popular with amateur radio operators as learner keys in the 1950s. They were made in several different configurations using the learner key and the more refined key.



Early Blue Point learner key.



Later Blue Point learner key.



Blue Point key and buzzer set.



Blue Point key, buzzer and light set.

Philips:

This key appears to have been made by Philips during the WW2 years for military purposes. It is quite likely they made other types, but I am not aware of them.



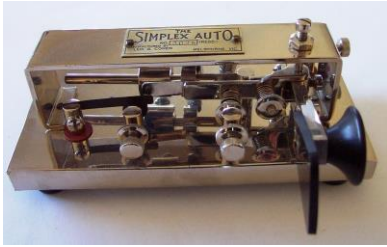
Department of Civil Aviation (D.C.A.):

The Department of Civil Aviation had a huge workshop in Sydney and it is claimed that they could and did make everything they needed. This key has a small DCA stamp under the base so it is assumed it was made by the Department.



Simplex Auto:

The best-known semi automatic key was the Simplex Auto. This was invented in the early 1920s by Leo G. Cohen, a Melbourne Telegraphist and continued through to the 1950s with the same basic design. It was made at various times in left hand versions and also as a fully automatic key. The Simplex Auto has been dealt with in detail in a separate article.



Simplex Auto semi automatic key.



Simplex Auto fully automatic key.

Pendograph:

Albert MacDonald, an Adelaide Telegraphist obtained a patent for his Pendograph semi automatic keys in 1908 and they were quite popular with Australian telegraphists. Three basic models were produced; two right angle models and an 'in-line' model. These have been extensively covered in a separate article.



Pendograph right angle model.



Pendograph 'In line' model.

Automorse:

The first fully automatic key made in Australia was the Automorse which was invented by an Adelaide Telegraphist Norman Percy Thomas in 1918. It is distinctive by its 'T' shaped upper frame. Again this key has been fully covered in another article.



Automorse left and right hand models.

Shurdot:

The label reads "Shurdot" Morse Key made by J. Scash 10 Randell St Mordialloc. There were two models of this key with only slight differences. See Ron McMullen collection. Mordialloc is located in Victoria.



Autoplex:

The Autoplex was made in Victoria, the label reading 'J. Vaile BF 8147 AUTOPLEX Leslie Crt Burwood Vic'. BF 8147 is the telephone number as it would have been designated in the 1950s.



Codemaster:

The Codemaster was made by BMR, Sydney and was similar to the Simplex Auto, but with the bridge supported by four posts. It carried a circuit closer fixed under the frame and as well as the 'Codemaster' label on the bridge, a second label reading 'B.M.R. Products 69 Pacific Highway Waitara Serial No. xxx' was attached beneath the base. Waitara is a Sydney suburb.



Piergraph:

The Piergraph semi automatic key was made by Robley and Tough, two telegraphists in the C.T.O., Perth who set up a machine shop in Pier Street, Perth, Western Australia in the 1920s. The label of the key pictured reads 'Piergraph No.2'.

It is not known if there was a No. 1 Piergraph.

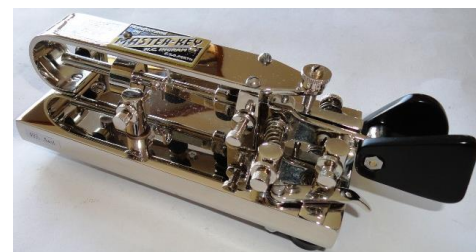


Ingram 'Master-Key':

Another Perth Telegraphist who made a semi automatic key in the late 1940s was H. C. Ingram who named his key 'Master-Key'. The label has MASTER-KEY between two diagonal lines with 'Manufactured by' above and 'H. C. Ingram C.T.O. Perth', below. Two models are known to have been made and a third similar type semi automatic key may also have been made, but I have no information on the latter.



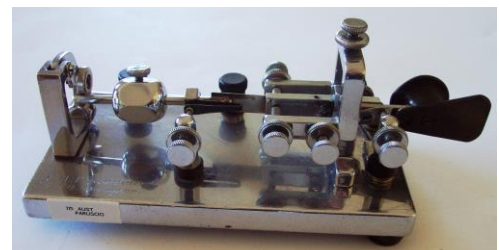
First model Ingram Master- Key.



Second model Ingram Master- Key.

L. A. Paruscio:

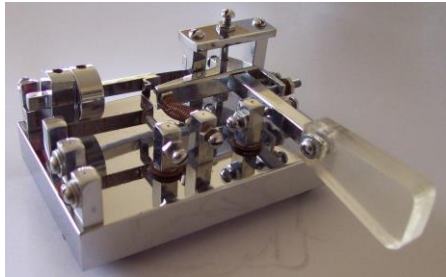
L. A. Paruscio (Lou) was a Telegraphist in the Melbourne C.T.O. and made a small number of semi automatic keys very similar to the Vibroplex Original with the 'swinging damper'. Serial numbers were represented by single indents under the base. Thus number 3 would have three indents. It is believed manufacture was ceased after approaches from Vibroplex.



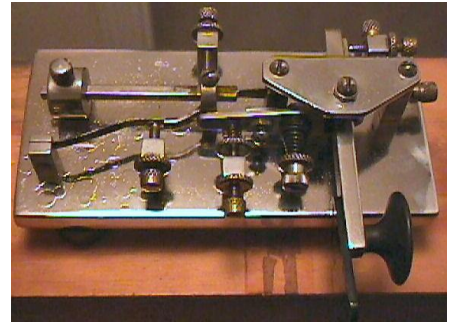
Other Semi Automatics:

Several semi automatic keys were made by individuals and only a very small number were produced, possibly because of production costs and competition from the widely accepted Simplex Auto and Pendograph. Little is known about their designers or the history of the keys.

A semi automatic key with the same basic design as the Simplex Auto, but with a much smaller bridge. I have no details of its name or its maker. See earlier version in my collection.



Mini jigger, maker unknown.



Recent makers:

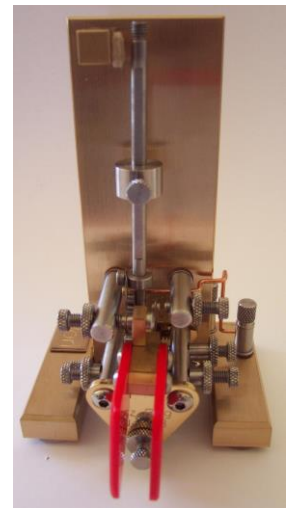
Perhaps the only recent or current maker of keys is Georg Goerge of Sydney. He makes very good straight keys, semi automatic keys and a vertical semi automatic.



Semi automatic key.



Straight key.



'Oz Bug' vertical key.

Sounder and resonator made by ex Melbourne Telegraphist Bill Morrow.





Louis Olsen was from North Queensland and circa 1970 made about 10 keys. There may have been two varieties.



Popular style of 1940s training key.

Other Telegraph Equipment:

Several organisations, PMG, A.W.A, STC (Standard Telephones and Cables) and Stromberg Carlson manufactured a variety of training, operational and field sets around the World War 2 period.



Army WT8AMP keys came in many configurations.



Fullerphone MK IV.



Army training set .



Army set D MKV.



Army set Wireless Remote Control Unit A.



Army daylight signaling lamp.



'Pandora's Box'. Used for testing underground cables.



Morse register. Not known if made in Australia or Slater was the distributor.



Multi purpose testing set.

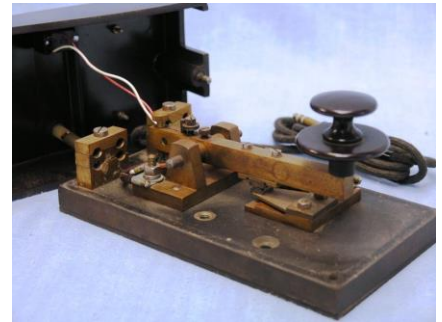


No. 4 detector. Made by both Master Instruments and A.W.A.

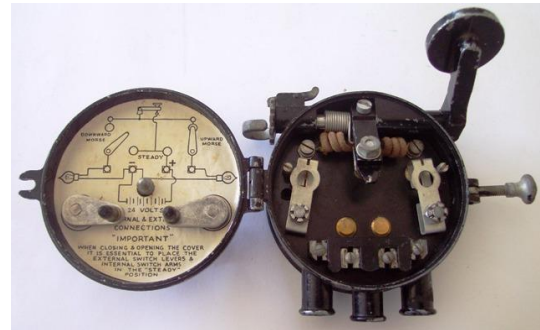


Australian Navy signal lamp made by R. J. Pearson, Enfield. N.S.W.





Military key made by Weston Electronics Sydney. Very similar to UK RAF Type D except for switch.



Aircraft Switch box.

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