

Volume 3 AMENDMENT No.5

After the publication of 'Wireless for the Warrior' Volume 3 'Reception Sets', more receivers in this category were found, now published in 'Volume 3 Amendments'. This amendment was compiled with the cooperation of Steve Dunford, who wrote the development history.



Reception Set A.E.W. 2 (N.Z.)

Country of origin: New Zealand
In cooperation with Steve Dunford

DATA SUMMARY

Organisation: US Joint Purchasing Board.

Design: Radio Corporation of New Zealand.

Manufacturer: Almost any radio manufacturer in New Zealand at the time.

Year of Introduction: 1945.

Purpose: Troop entertainment.

Frequency Coverage: 550-1850kHz.

Circuit features: Superheterodyne with an IF of 455kHz; mixer/local oscillator, IF stage, detector/AVC/1st AF stage, AF output.

Valves: 6K8GT, 6U7G, 7Q7GT, 6V6GT, 6X5GT.

Power Supply: 110V AC mains.

Size of cabinet (in): Height 7½, length 11½, width 8.

Weight (lbs): 15.

Remarks

Reception Set A.E.W. 2 (N.Z.), was a medium-wave broadcast band radio receiver. It was designed and produced in New Zealand for troop entertainment as one of several sets manufactured as part of a nationwide program that kept the radio industry busy during wartime production restrictions. The radio had an extended frequency range covering 550-1805kHz, powered from 110V AC, and built into a steel cabinet with built-in loudspeaker. This set was almost certainly designed by Radio Corp NZ as it was a close copy of their Model 12 from 1940, with certain parts like the oscillator coil being virtually identical. However, manufacturing contracts during the war were controlled by the Ministry of Supply (specifically Ralph Slade, the Controller of Radio Production). Designing something did not automatically mean that the designing company would also make it. However, in this case almost all capable radio factories (large and small) made some 6000, contracted by the USJPB (US Joint Purchasing Board) for the US forces in the Pacific. They were, for this reason, 110V AC. Radio Corp NZ manufactured a number, and they also provided several parts, including the clear dial cover and the knobs. They also participated in the assembly of spares packs.

References:

- Correspondence, advice and permission to use photographs, circuit diagram and text from his book was kindly granted by Steve Dunford, New Zealand.
- 'The Radio Corporation of New Zealand story', Steve Dunford, ISBN 9780473714970. Website: www.vintageradio.co.nz
- Production image from the Audioculture article on the history of HMV.
- Wireless for the Warrior, Compendium 2, L. Meulstee, 2012, ISBN 978-90-819271-0-9.

In this amendment, the company name 'Radio Corporation of New Zealand' was in the text shortened to the more generally used 'Radio Corp NZ'.



It is believed that the A.E.W. 2 (N.Z.) was a close copy of Radio Corp NZ Model 12 (Columbus/Courtenay) of 1940.

Development history of the A.E.W. 2 (N.Z.) by Steve Dunford, New Zealand.

By contrast with the A.E.W. 1, the A.E.W. 2 was a far more successful project for all concerned. Manufacturing was on a cost plus arrangement, meaning everyone actually made money, and as it was a simple design that most radio firms would have been very used to working with already, no real problems (beyond parts shortages) were reported. 6000 were made for US forces in the Pacific, and the design itself was almost certainly a modified version of the Columbus model 12 from Radio Corp. Even the cabinet styling seems to have taken a cue from the Columbus cabinet, with its single vertical ridged grill bar. One report from the office of the Controller of Radio Production suggested it was even originally specified with a plywood cabinet, but of course, this would not do for a military item and so a steel version was designed.

The design, unlike the very militarised design and specification of the A.E.W. 1, was much more simplistic, and essentially a do-

mestic broadcast band radio with a rugged cabinet and an expanded reception range (550 to 1850kHz rather than the more normal 550 to 1500kHz of the time).

A good percentage of the supplied sets, and their spares kits, were assembled and packaged at Radio Corp. They were also a noted supplier for many of the parts used including tag strips, valve shield bases, some tubular capacitors, electrolytic capacitor clamps, speaker baffles, celluloid dial windows and the Bakelite knobs (identical to those on the model 12A).

It seems that not all the finished sets delivered, or were perhaps excess sets were made, or the USJPB sold off surplus sets in the New Zealand market after the war end because there are A.E.W.2 radios in collections. An A.E.W.2 dial which appears to be the military version, with a new brand name stuck on over the serial number area around New Zealand (the author has one) which appear to be military surplus, with non A.E.W. dials.

Some have the full band coverage of the militarised versions, while others have been modified for standard broadcast band coverage. Some even have ARTS&P labels fitted, indicating they were legitimately sold in a retail setting.

It's worth noting here that while the names of the sets seem to indicate a connection, the author has been unable to find any tangible link between the Army Education Welfare Service (A.E.W.S.) and the A.E.W.1 or A.E.W.2. The A.E.W.S. seems to primarily have been tasked with preparing those serving in the military for life after the war with training courses on all manner of topics, including radio design and servicing.

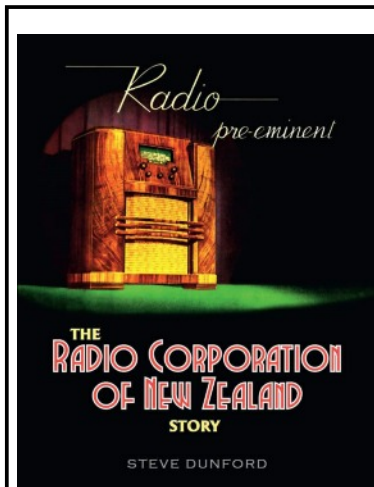
The courses were run remotely, much like a correspondence service, with each army unit having an education officer responsible for ensuring the modules were distributed, completed and returned for marking.



This black-painted variant had an ARTS&P label and plain dial (right). The radio was probably sold as military surplus after the war.



Production of A.E.W. 2 (N.Z.) radios in the HMV plant (right). Note the Staff Sergeant in the background closely observing the workers. An ex-Westco employee who made these recalls that there was an Army inspector on their line checking and, once accepted, broad-arrow stamping each one.



'The Radio Corporation of New Zealand story', by Steve Dunford.

The book, first published in June 2024, containing nearly 800 photos, images, and advertisements spread over 408 pages, encompasses the golden age of radio, and is a must for radio enthusiasts, social history buffs or those interested in New Zealand's manufacturing past.

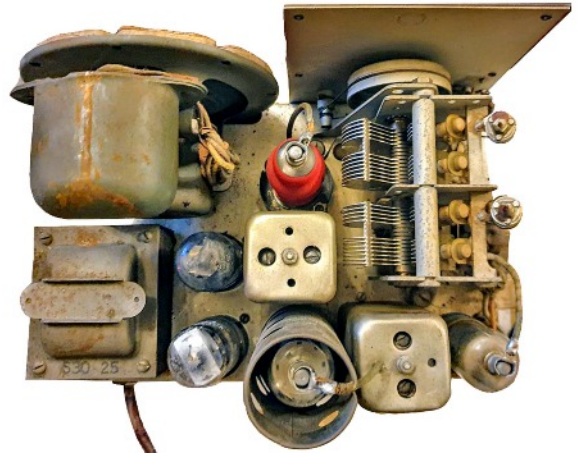
In 1929, a small shop opened in Wellington - repairing radios, and supplying parts to those building their own. The owner, William Marks, had only arrived in Wellington a few years earlier - but within a few short years he would grow this small store to become arguably the largest electronics manufacturing and distribution organisation the country had yet seen. The firm began as W. Marks Ltd., but would soon be given a title more closely resembling Marks'

ambitions - Radio Corporation (N.Z.) Ltd. By the end of 1936, Marks would take his company public, changing its name once more, to the Radio Corporation of New Zealand Ltd - and alongside it sat his new retail arm - a nationwide chain of stores called Columbus Radio Centres. This book follows the development of the company and its products from its earliest days until it was eventually taken over, in 1959, by Pye (N.Z.) Ltd. The core details are interwoven with stories from the factory, stories about the staff members who made it more than just a job, stories about their radios, the brands they manufactured (including Columbus and Courtenay) and technological breakthroughs they made in the radio field.

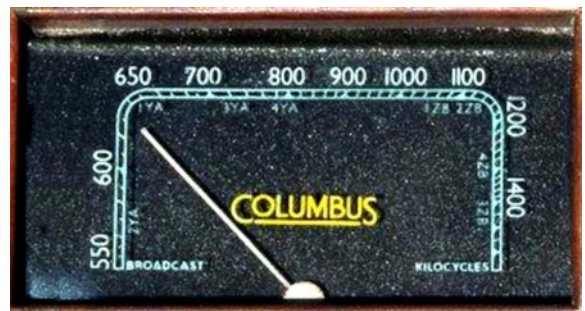
A limited print-run copy can be ordered directly from the author at www.vintageradio.co.nz or through the New Zealand Vintage Radio Society at <https://nzvrs.com/>



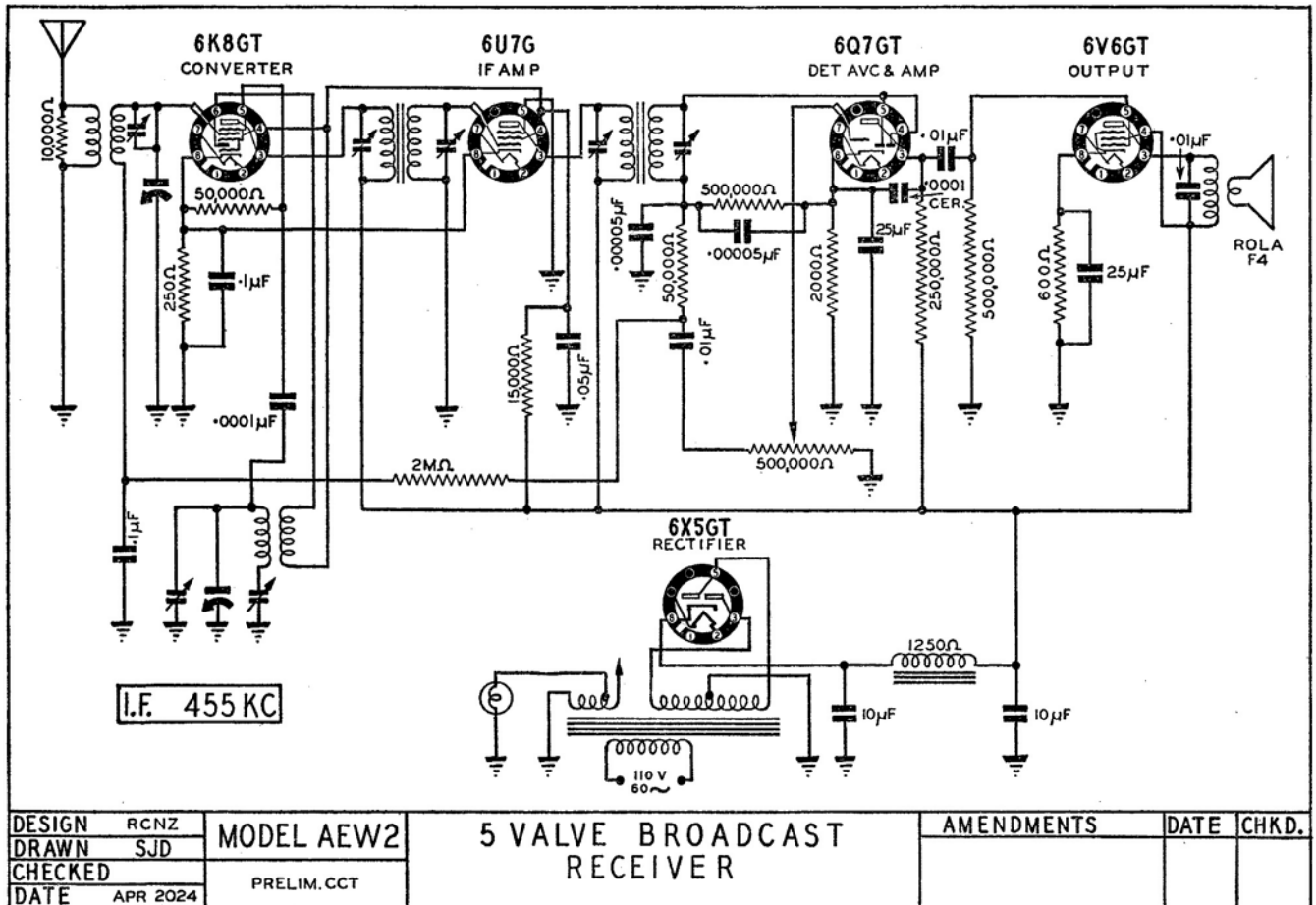
Front panel layout of a A.E.W. 2 (N.Z.) showing the simplicity of the controls: volume control left, tuning control right and on/off switch centre below.



Top view of A.E.W. 2 (N.Z.) chassis.



There were many similarities, both external and internal, between the A.E.W. 2 (N.Z.) and the Model 12. The dial (A.E.W. 2 left and Model 12 right) and the ridged vertical bar across the speaker grille being the first clues as to its heritage.



This circuit diagram was reworked from the 1940 Radio Corp NZ Columbus model 12, of which the A.E.W. 2 (N.Z.) was a close copy. No manual has been discovered for the A.E.W. 2 (NZ), despite the Columbus model 12 documentation being fairly similar.