

VINTAGE RADIO

By JOHN HILL



My fancy European models

All the radios in my collection were Australian made until a few months ago when, suddenly, two additions changed all that. It happened when a friendly retired farmer knocked at my door.

Don had heard that I collected radios and, as he was selling up and moving into town, it seemed that he would have no further use or room for his valve receivers. He thought I might like to buy them. Being interested in any valve radio, I went out to his utility to inspect the sets he had to offer.

I found myself looking at two of the most impressive receivers I had ever seen. One was a dual-wave, 5-valve, Dutch Philips receiver with tuning indicator and twin speakers; the other a German Nordmende receiver.

The Nordmende is a large table model; correction, a very large and heavy table model. It is multi-band and covers all the frequencies one would expect of such a receiver. However, the big bonus with this set is the fact that it has an FM band as well. Not only is it capable of tuning in FM stations, but it does so in stereo as well.

A valve count reveals that the Nordmende has 11 valves plus a tuning indicator. As six of the valves are twin types the set has, in reality, 17 valve functions.

Each channel has an ELL80 (twin power pentode) in the output stage which drives two speakers in push-pull. The set has four speakers in all. Although I have no specifications on the set, eight watts per channel seems a realistic figure. The Nordmende is quite a radio!

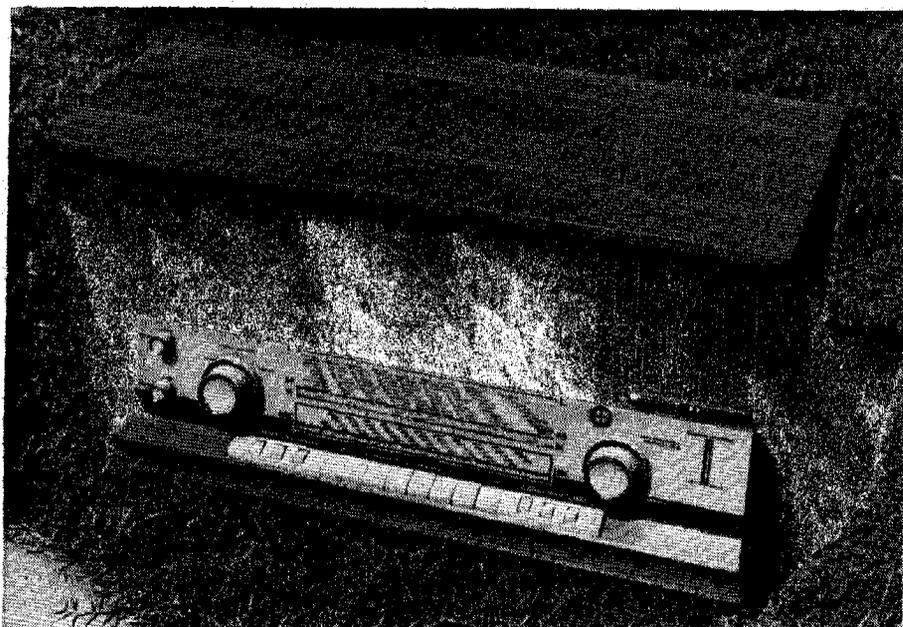
When I first saw these sets in the back of the ute I was impressed, but deep down inside I thought that they would be too expensive to buy. However, the prices were not as bad as I thought they would be and when I was told "\$10 for the small one and \$40 for the big one", it seemed to be a reasonable price. I hoped Don wouldn't change his mind while I fumbled for my wallet.

\$50 for two imported receivers in excellent condition and working order was a good buy. Both sets have an up-market look about them that makes them quite desirable from a collector's point of view.

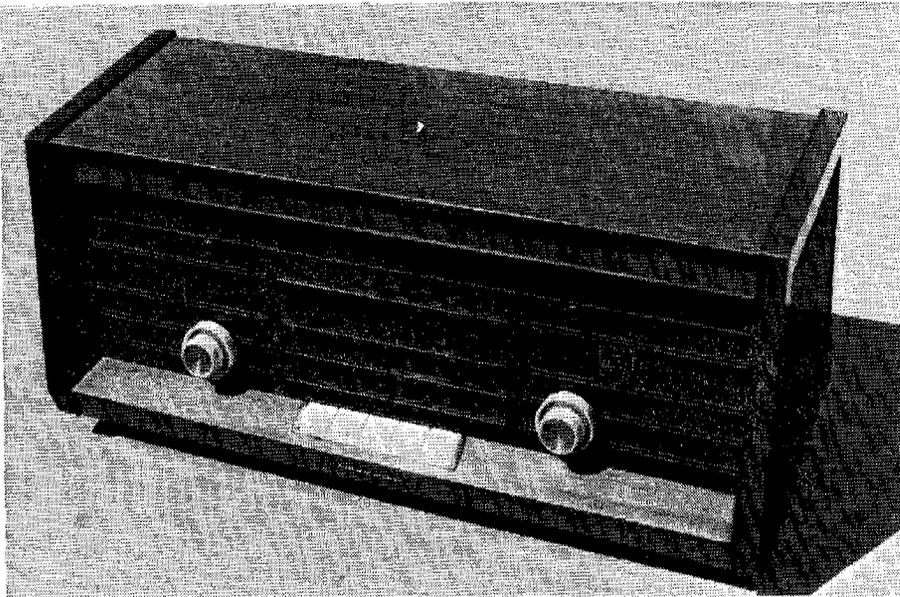
Of the two, the Nordmende is the more outstanding. Apart from the FM stereo aspect, it also has other features that seem to be typically European.

The large full-width dial is one such feature. All the major stations are marked with the name of the city from which they broadcast. Place names such as Frankfurt, Budapest, Berlin, Brussels, Belgrade, and many others cover the dial. There is little doubt as to the market for which the set was made.

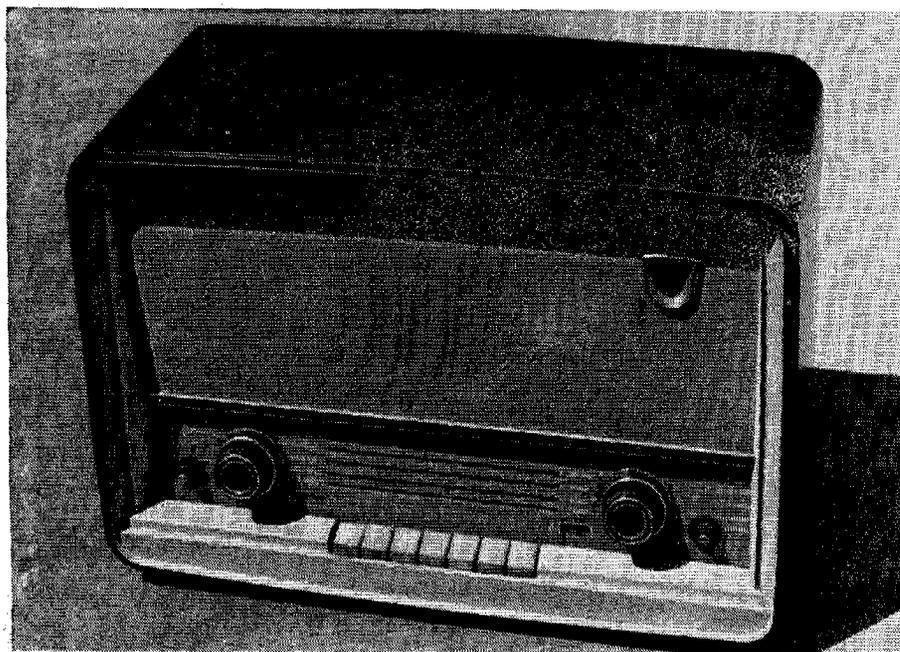
At the push of a button, one can change from the receiver's internal aerial to an external aerial if so desired. The built-in aerial is a ferite rod which can be rotated through nearly 360 by turning a control knob on the front panel. There is also a visual indicator to show the rotary aerial's position. This feature seems



The Nordmende receiver is a large & impressive table model. It has four loudspeakers and two push-pull channels for stereo FM or for an external stereo turntable.



This imported Dutch Philips set is an up-market 5-valve receiver. It has separate bass & treble controls, three shortwave bands and a tuning indicator.



This additional European-made Philips receiver was acquired from a country junk shop. When fully restored, it will make a very worthwhile addition to the author's collection.

to be fairly common on the better class of European receivers.

The aerial for the FM tuner is also built into the set and takes the form of a foil ribbon attached to the inside of the cabinet. A directional aerial for FM reception would have been a good idea but has not been incorporated into the design. There is a socket for an external aerial if required.

Pushbutton switches

Another feature is the set's pushbutton switches. All wave-change and

on/off functions are carried out by a block of pushbutton switches at the front of the receiver. While these switches are working at the moment, the mind boggles at the thought of what might happen when they wear and do not switch in and out properly.

Tone control on the Nordmende is better than average. There are two controls; one for bass, the other for treble. Very few radios have separate bass and treble controls. It also has provision for a pickup, which means

Service Tips

Instability Problems

Most cases of instability (hollow sounding reception and/or whistles when tuning across a station) can be traced to faulty electrolytic filter capacitors. Another cause can be poorly earthed or missing valve shields, particularly around the IF valve.

Always suspect Philips "metalised" valves - these were sprayed with a gold or red metallic paint which was earthed via a thin wire around the valve at the bottom of the painted section (just above the bakelite base). This wire went down into the socket and connected to a valve base pin which was earthed. The red valves, such as ECH33, ECH35 & EBF35, frequently have paint which is cracked & flaking.

Bases can also become loose. Repairs can be attempted with Araldite® & by hand painting with a metallic conductive paint. If problems persist or if the old paint has flaked badly, replace the valve or fit a shield.

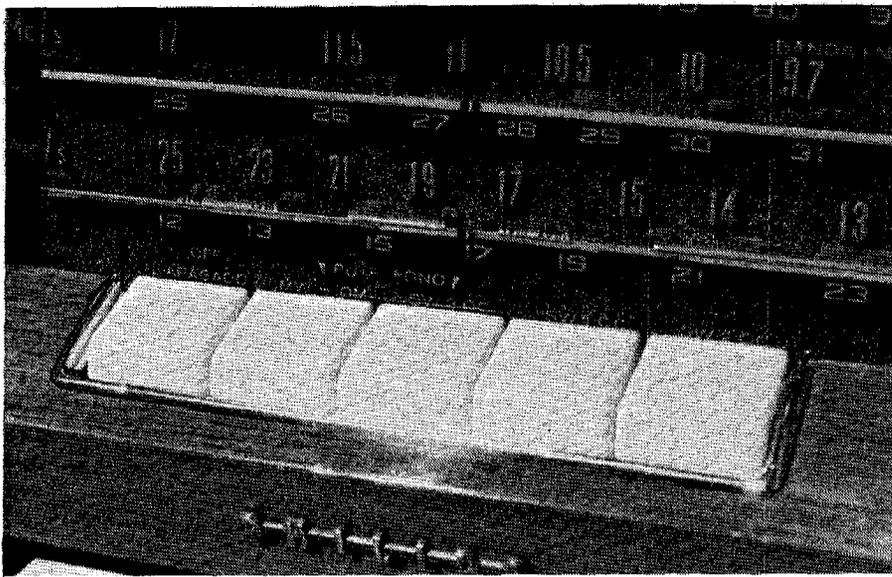
Alignment of Early Receivers

Many early superhets are aligned using trimmer capacitors accessed through holes in the top or (less frequently) bottom of the IF cans. The trimmer across the primary often has full high tension voltage on the adjusting screw and this is easily shorted to the can by a metallic screwdriver blade. Use a sharpened knitting needle as an alignment tool. It will also eliminate any detuning which can be caused by a metallic blade.

that records and tapes can be reproduced in stereo if required.

It is fairly obvious that the Nordmende, with its two (stereo) channels, is a fairly late model valve radio. Although old valve receivers are generally considered more collectable than modern ones, I do not believe this to be the case with my twin-channel German model. I consider it to be very collectable because of its rarity.

The 5-valve Dutch Philips is also from the tail end of the valve era and



Pushbutton switching was popular in Europe at the time the Philips & Nordmende receivers were made. It works well but could be troublesome to repair if anything goes wrong.

it looks a very modern radio. This is in spite of the fact that it has a timber cabinet; something we have come to expect with older models, rather than with modern sets. Its shape is long and narrow, with a 7 x 5-inch oval speaker housed behind a plastic grill at each end. The cabinet stands on short legs and the overall effect is quite stylish.

The dial has only the appropriate frequencies for the broadcast and three shortwave bands. The large dial glass occupies almost the entire front of the set.

Like the Nordmende, the Philips receiver has separate bass and treble controls. These two radios are the only

ones in my collection that have this refinement.

Pushbutton switches must have been the in thing in Europe at the time, and the Dutch seemed to have been just as keen as the Germans to use them. A cluster of switches at the front of the receiver controls the on/off and band-switching functions.

Removing the chassis revealed that the receiver is a fairly standard five valver. The valve complement is: ECH81, EF89, 6BD7, 6BQ5 and 6V4. The tuning indicator is a type EM84 and is situated at the left hand side of the control panel. This indicator was not working when the set was bought but what can you expect for \$10! A

good secondhand replacement soon solved that problem.

A good point with both of these imported radios is that they are built with quality components. There are no horrible paper capacitors, as in older sets, which frequently break down and give trouble. The sets needed very little work done on them apart from a good clean up.

In keeping with many other European sets, both receivers can be plugged into a wide range of power supplies. A rotary switch selects one of a number of power transformer taps from 90V to 220V. The 220V tapping worries me a little, for the reason that the local supply is around 250V. As a result, everything lights up fairly brightly. Hopefully there is sufficient tolerance in the design to accommodate the difference.

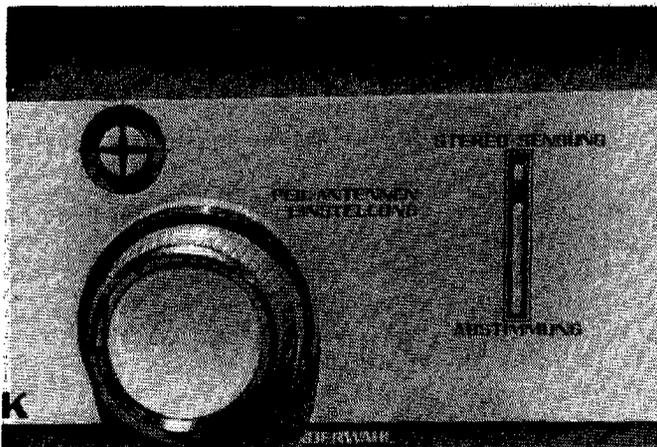
Another Philips

My wife keeps telling me that things always happen in threes and this time, she was right. Personally, I consider such happenings to be coincidental.

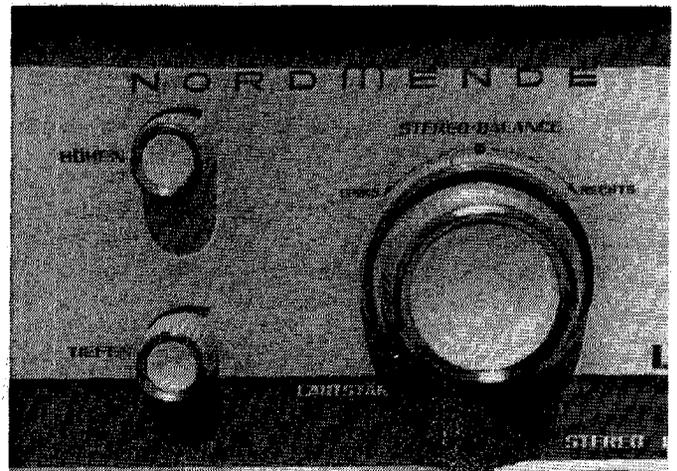
Nevertheless, while browsing through a country junk shop, there it was - another Dutch Philips receiver. Once again it was a large table model, only this one was in Bakelite, or so I thought at the time. Removing some of the grime revealed a dark brown plastic - definitely not Bakelite!

Anyway, I can't complain too much. \$25 for a 6-valve receiver, with a tuning indicator and in working order, wasn't an unreasonable price to pay, even if it was a bit shabby.

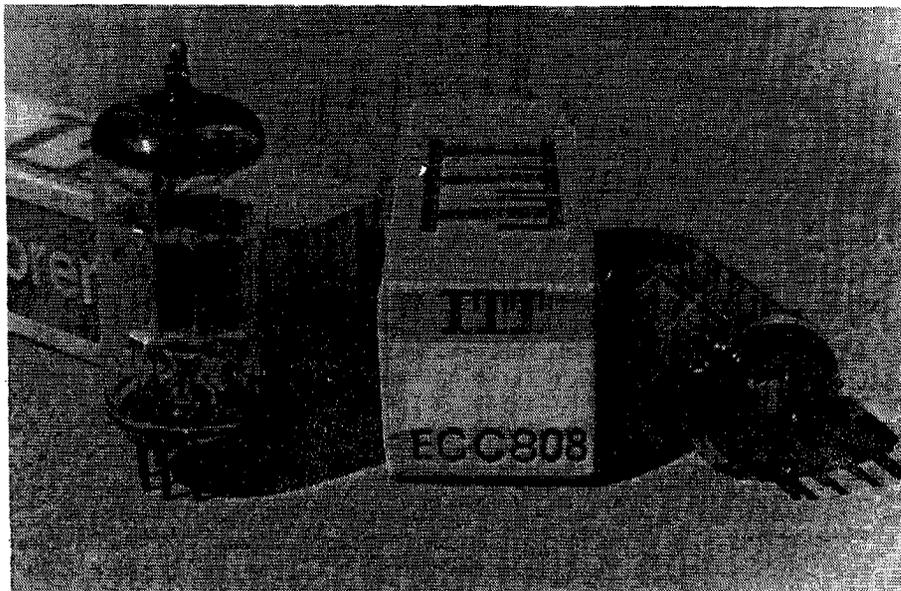
This second Philips receiver has



This close-up view shows the righthand control knobs on the Nordmende. The inner knob is for tuning, while the outer knob rotates the internal aerial. The rotary aerial position indicator is above left of the control knobs while the tuning indicator is to the right.



These are the lefthand control knobs on the Nordmende. The large inner knob is for volume while the outer knob is the stereo balance control. The two smaller knobs to the left are the bass & treble controls.



Many European sets have odd (by Australian standards) valves in them. The ECC808 valve is just one example and those shown here had to be imported at considerable expense.

many of the previously mentioned features of the other two European sets: separate bass and treble controls, pushbutton switching for on/off and shortwave bands, and an inbuilt rotating ferrite rod aerial. But unlike the Nordmende receiver, there is no FM - stereo or otherwise. At the time of writing, this receiver has not been restored and is currently waiting its turn.

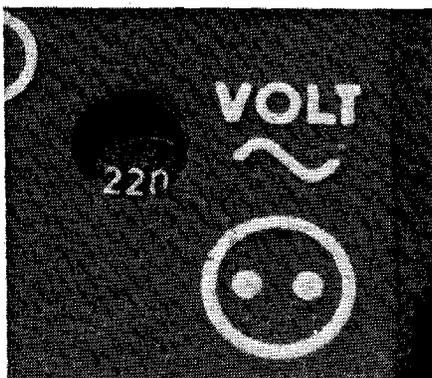
Disadvantages

So far I have painted a fairly colourful picture of these imported European receivers. Readers could be forgiven for thinking of them as the Mercedes or Volvos of the vintage radio world. While they are unquestionably good quality receivers, there are a few unfavourable aspects about them.

First, these up-market radios are not that good to work on. Many of the sets in my collection can be separated from their cabinets simply by removing the control knobs and two, or perhaps four, screws. Not so with some of the European varieties - there are lots of things to remove or disconnect before the chassis can be removed.

Second, these European receivers invariably have a few (to us) non-standard valves. The valves used may be reasonably common on the Continent but here, in the land of Oz, they can be virtually impossible to obtain.

You want proof? Well try this. The



The 220V transformer tapping on the Nordmende set is a bit low for Australian conditions. Hopefully, there is enough tolerance built into the set to withstand the extra voltage.

Nordmende has two ECC808s in its circuit. Try finding a catalog listing, then try to locate a couple of valves. Or, if you think that's an easy one, see how you go with the EMM803 tuning indicator. If you find a supplier of these I would like to know who and where.

The big plastic-cased Philips has a UL41 valve. Although not unobtainable, it is by no means a common valve. An EM80 tuning indicator may also be a bit elusive to track down.

Anyway, despite the good points and bad, my European receivers perform fairly well and are worthy additions to my collection. A good collection needs some variety and a few unusual receivers from abroad can provide just that. **SC**