



# Equipment Review

# KENWOOD

## Kenwood TM-721A Dual Band FM Transceiver

**Gil Sones VK3AUI**  
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The Kenwood TM-721A Dual Band FM Transceiver is a very accomplished radio. The case is no bigger than that of many single band FM transceivers of just 10 years ago. They could only manage 10 watts on one band. The TM-721A gives you 35 watts on 432 MHz and 45 watts on 144 MHz. Quite a step forward and with so many other features as well.

Power output was well up to the specification and was maintained over a reasonable range of standing wave ratio. This was observed by monitoring power output and SWR whilst using the radio with normal commercial aerials throughout both the 144 and 432 MHz bands. Power output was maintained throughout the band whilst the SWR varied.

One interesting accessory is a dual band aerial and duplexer which would be useful for mobile operation. The TM-721 has separate aerial inputs for each band which allows great flexibility.

Duplex operation is possible should this be desired as there are really two radios in the one box. Of course, the ability to monitor one band while operating on the other is a great convenience.

Both bands can be monitored and the audio from both can be mixed into the loudspeaker. The mix is continuously variable so you can always turn up or down either. Very useful for monitoring without upsetting the loudspeaker volume.

Naturally the full range of features we expect from a radio is provided with a few extra niceties. The beep tone which accompanies many of the push-buttons can be turned on or off. The tone of the beep is different for each push-button. Very handy when you are zooming along the highway.

The TM-721 is very well packaged and comes complete and ready to go on the air.

On air the deviation in the review model was on the low side. This could easily be corrected by adjusting the microphone gain control. This is a personal choice as it does depend on how loudly one speaks into the microphone. For mobile use, if you have it wound up too far, the road noise becomes obtrusive. So maybe the setting was a reasonable compromise.

I do have one small complaint and that is the use of series UHF RF connectors on both 144 MHz and 432 MHz. Surely in a radio of this quality Type N connectors could be used.

Internal construction of the transceiver is very clean. The use of Surface Mounting Components has contributed greatly in this regard together with the use of connectors on wiring looms. A big advance on the rats nest that used to be inside the lid.

On air the radio worked perfectly on both bands. I was pleased to have been able to make a contact through the repeater VK3RNE to VK2ACP at Wentworth Falls, New South Wales. Quite a reasonable distance from both stations to the repeater. The contact was of course aided by favourable tropospheric conditions. Other contacts on both 144 and 432 MHz bands were most satisfactory.

Well, that brings me to the bottom line. I can thoroughly recommend the TM-721 and it is now up to you and your bank manager whether you can drive one.

Thanks to Kenwood for supplying this review transceiver.

For further information about the Kenwood TM-721 contact Kenwood Electronics Australia Pty Ltd, 4E Woodcock Place, Lane Cove, NSW. 2066, phone (02) 428 1455 or your local Kenwood Dealer.

## Kenwood TM-421A 70 cm UHF FM Transceiver

For those who need a small 70 cm FM transceiver the Kenwood TM421A is an excellent choice. Full features together with a conservative 35 watt power output are packaged in a very neat and small package. A very impressive radio indeed from Kenwood.

Panel Layout is very clean and uncluttered. This is even more impressive in view of the features and performance of the transceiver. Controls are of a reasonable size allowing easy and unambiguous operation.

For such a small physical size the output power is claimed as a most impressive 35 watts. On test the TM421A was able to provide 40 watts or more into the antenna cable. This was with a wattmeter which is very reliable and not given to generous outbursts.

The receiver is unfussed by strong local transmissions and appeared to be of quite adequate sensitivity.

Internal layout is also clean and uncluttered. Surface mounted devices are extensively used and the RF is amplified in a Module. Send receive changeover is by a diode switching arrangement which avoids clattering relays.

On the rear of the case is a substantial heat sink. This needs to be kept clear so as to allow for clear circulation of air. The heat sink gets quite warm in use and should not be blocked - something to consider when mounting the transceiver in your car.

My one complaint is the use of a series UHF RF connector for the antenna connector. For such an excellent transceiver a Type N connector is appropriate. Seems a great pity to mar such an excellent radio by fitting such a connector.

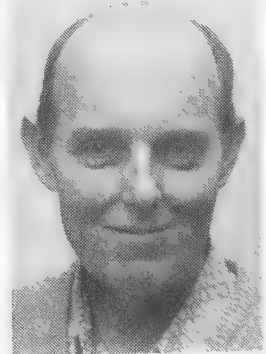
The packaging is of the usual high standard. Individual items are covered in plastic and fitted into a foam insert inside the outer cardboard box.

The instruction book is clear and includes both block and circuit diagrams.

Definitely a transceiver which can be recommended.

Thanks to Kenwood for supplying this review transceiver.

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### ABOUT THE REVIEWER

**Gil Sones VK3AUI**, was first licensed as VK3ZGS, in 1963, and upgraded to VK3AUI in 1969.

Gil is employed by the State Electricity Commission of Victoria as an Engineer in the telecommunications field.

Amateur radio interests are principally in the VHF/UHF area and he is a keen 6 metre operator. Over past years Gil has been a driving force in the provision of a beacon keyer and equipment to activate Macquarie Island, Heard Island and Willis Island on 6 metres.

Gil has been involved in the production of *Amateur Radio* magazine for many years, a valued and hardworking member of the Publications Committee and a past Editor of the magazine.

Other interests are travel, cycling, bird watching, hot-air ballooning and generally enjoying life.