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**EQUIPMENT REVIEW** 

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## TYT TH-UVF1

## A new, smart-looking low-cost dual band handheld enters the fray



The TYT UVF1 looks quite striking with its shiny speaker grille and comes with a decent selection of accessories as standard.

MORE FROM THE FAR EAST. The TYT TH-UVF1 is one of the new breed of inexpensive dual-band handhelds emerging from the Far East. Designed and built in China, it feels nice in the hand and has a slightly space-age look about it thanks to its bright metal speaker grille.

WHAT'S IN THE BOX? As is increasingly common, the radio is supplied in a double-layer box with the radio and slender 48-page manual in the top layer. In the lower tray is the 1500mAh Li-lon battery, flexible aerial, hand strap, a belt clip that attaches to the back of the set using screws that are provided, a drop-in charger with linear plug-top PSU and a cigarette lighter charger lead. Charging the battery from flat takes about 5 hours; a red 'charging' LED turns green when the battery is full.

FIRST IMPRESSIONS. Everything goes together quite nicely. The battery clips securely into place but is easily removed with a simple pushbutton latch. The 17cm-long antenna is a normal SMA type, somewhat shorter and slimmer than some of its contemporaries. The radio feels nice in your hand: solid, smooth-but-grippable and not too heavy.

Turning it on via the inviting power/volume knob on the top illuminates the clear dot-matrix LCD. You can select blue, orange or purple backlight via a menu option – I was rather taken by the purple option. The display

consists of two rows of 7 characters plus various annunciators. On 6.25 and 12.5kHz channels the last 25, 5 or 75 are solid characters slightly less than half the height of the main dot matrix figures. The legends on the keypad are easy to read but the keys are not backlit.

IN USE. Basic operation is quite simple. You can enter a frequency via the numeric keypad, or step up and down using the arrow keys at the top of the keypad. Switching between bands is as easy as pressing the U/V button. More complex matters are handled using the menu system, accessed via the red MENU key at the top left. There are some 34 menu options in total, all documented adequately in the manual, but the first 10 are easily accessed by pressing MENU followed by one of the numeric keys, which are also labelled with their menu functions. So, to set the squelch, press MENU 5 to bring up the SQL setting, press MENU again to activate the 'change' function, then press the up/down arrows to set the desired squelch level.

The only thing I found remotely awkward was switching repeater shift on and off. This is done via Menu number 30, cryptically named 'S-D' (for Shift Direction). However, it is possible to set up and name the 128 memories for commonly used channels, so it would make sense to set up local repeaters and simplex channels in this way for easier use. I suspect that the optional TH-UVF1 control software and associated would make this easier, but at a cost

Audio quality is decent. Transmit audio is quite good, while the receive side sounds a little lacking in bass. Some might consider this a benefit, in that it's more 'punchy' on receive. Deviation can be selected as Wide (5kHz) or Narrow (2.5kHz).

**Table 1** summarises the technical performance of the sample radio. The RF power output didn't quite reach the claimed 5W but receive sensitivity was significantly better than the published specification.

GENERAL FEATURES. There isn't space to review all the features of this nice little handheld but some of the ones I found interesting included the voice synthesiser, a pleasant American-ish female that announces key presses and menu options - including menu settings - although it doesn't seem to be possible to read back the current frequency. There is an FM broadcast receiver that operates from 70-108MHz so it actually covers the 4m band, receive only, but of course it's wide band FM so 4m NBFM is at best rather quiet. I found it worked fine on broadcast FM. There are 25 separate memories for broadcast stations. Additional extended receive bands are included, covering 136-174, 350-390 and 400-520MHz.

There is a built in VOX that can be used with an external mic. A switchable compander function allows a certain amount of audio compression; this can increase 'talk power' even on FM. You can set the backlight to off, auto (lights on keypresses) or permanently on. There is a switchable receive power saver and a battery voltage meter. CTCSS encode and decode is included and works well. Frequency steps can be selected as multiples of 5kHz or 6.25kHz. The radio supports dual receive but is not capable of full duplex operation.

CONCLUSION. The TYT UVF1 is a workmanlike and robust-feeling handheld that includes all the features you'd expect from a dual-bander and, at £99.95, is quite reasonably priced compared to some competitors. Our thanks to Nevada Radio for the loan of the review model.

TABLE 1: Basic performance figures as measured by RSGB.

TABLE 1: Basic performance rigures as measured by Noub.		
	2m	70cm
Power output measured / (spec)	4.62W (5W)	4.6W (5W)
Receive sensitivity measured / (spec)	0.232µV	0.227μV
	-125.7dBm (-122dBm)	-125.9dBm (-122dBm)