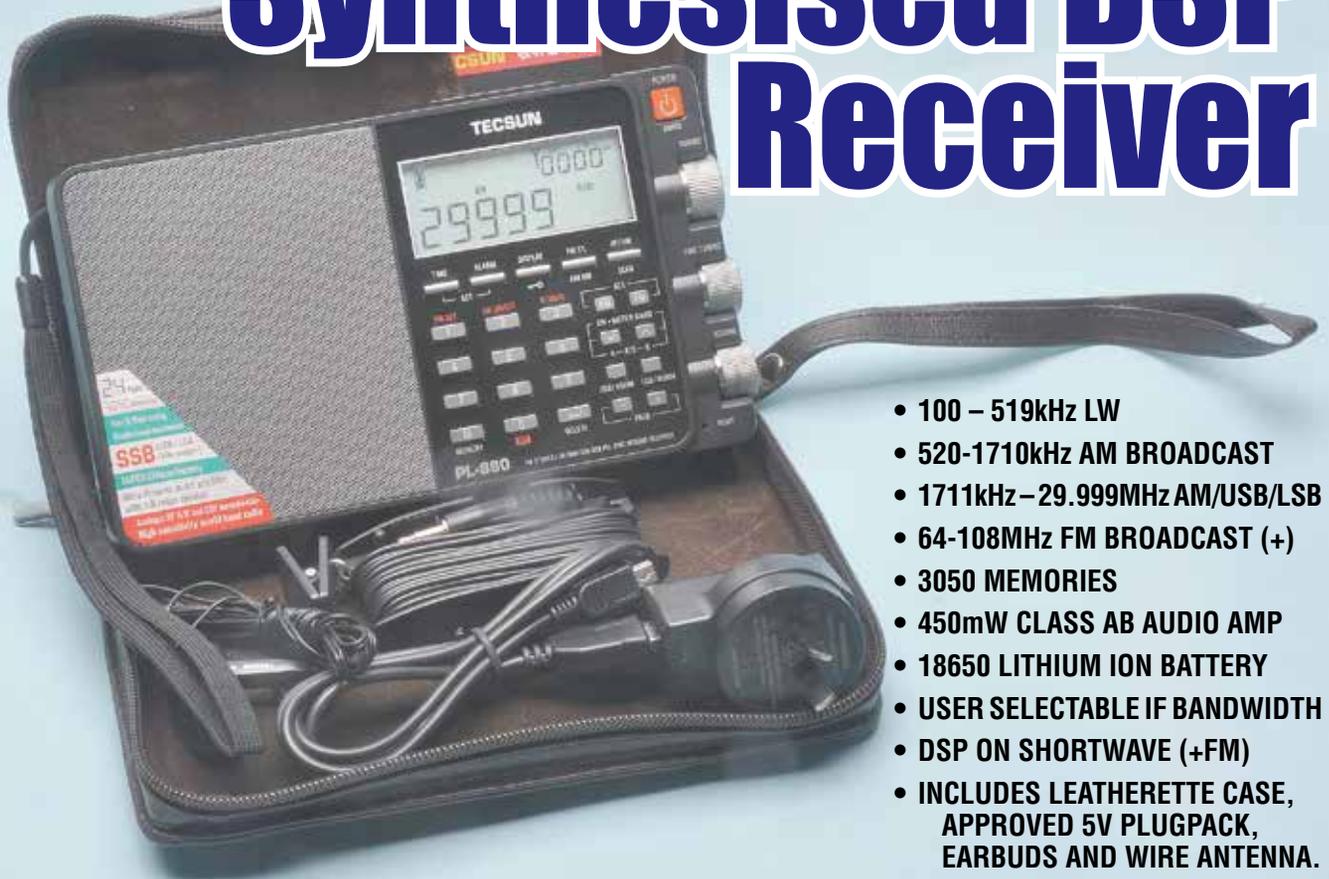


Just in time for Christmas...

Tecsun PL-880 PLL Synthesised DSP Receiver



- 100 – 519kHz LW
- 520-1710kHz AM BROADCAST
- 1711kHz – 29.999MHz AM/USB/LSB
- 64-108MHz FM BROADCAST (+)
- 3050 MEMORIES
- 450mW CLASS AB AUDIO AMP
- 18650 LITHIUM ION BATTERY
- USER SELECTABLE IF BANDWIDTH
- DSP ON SHORTWAVE (+FM)
- INCLUDES LEATHERETTE CASE, APPROVED 5V PLUGPACK, EARBUDS AND WIRE ANTENNA.

It's been a while since Tecsun Radio Australia added a new model to their range but the new PL880 looks like the wait has been worth it!

It's described as a "high sensitivity world band radio" but that is almost damning it with faint praise – it's so much more than that and would suit every user from the occasional eavesdropper to the dedicated shortwave listener.

Because it offers digital signal processing (DSP) on SSB as well as the more usual FM, and because it offers 10Hz steps on USB/LSB it would also be perfect for resolving HF amateur radio transmissions, which almost invariably these days are SSB.

Digital signal processing offers cogent

performance advantages, particularly in the reception of weak signals.

It's definitely not a pocket-sized receiver – at 190 x 113 x 32mm, the PL880 is significantly larger than most of the other Tecsun models we've seen. And at about 600g including battery, it's not a lightweight either! But they've obviously used the extra space to offer features and performance which far exceed those of the smaller cousins.

First, the bands covered are somewhat expanded: FM starts at 64MHz, up to the usual 108MHz, so you get quite a lot of the

low-VHF band as well as the "usual" FM broadcast band. You'd be surprised what there is to listen to down there – take it to the football and listen in to the referee's radios, for example.

Similarly, the AM broadcast band is a little wider than normal at 520-1710kHz and the "shortwave" bands starts right at 1711kHz and go all the way up to 29999kHz (29.999MHz) in 1kHz steps.

A long-wire shortwave antenna is supplied which plugs into a socket on the side of the radio – this socket can also be used to connect a better (ie resonant) antenna.

Before we get into the technicalities of this radio, we also note a significant departure from previous power.

Most small radios (previous Tecsons included) operate from "AA" cells. Usually there are three of them (for either 4.5V or 3.6V, depending on whether they are alkalines or rechargeable NiCads). This one, though, has a single "18650" 3.7V, 2Ah Lithium-ion cell.

We've been expecting to see a lot more devices powered this way – more capacity for less size – but the uptake has been a little slow. Top marks to Tecsun! Incidentally, a feature on the advantages of using lithium-ion cells appeared in SILICON CHIP, June 2013.

It's supplied with a 5V (and Australian approved!) mains plugpack (no getting fried by dodgy cheapos here . . .).

Being 5V, it will also operate from a USB socket, whether that's on a computer or any other device. The 5V supply is also perfect for charging the Li-ion cell, which it does whenever plugged in. Incidentally, the Li-ion cell is removable, just the same as you would AA cells, so can be replaced when it will no longer accept charge. That's likely to be years away, depending on use.

The audio is significantly better than you'd get from a typical small radio, with a 450mW class AB amplifier and full-range speaker built in. There's also a bass/treble switch to assist and of course, a 3.5mm stereo headphone socket is also built in (with ear buds supplied). A line output socket is also provided for a recorder, external amplifier, telephone system, etc.

Of particular interest to avid short-wave listeners is the user-selectable IF bandwidth: on AM you can choose 9.0 or 5.0kHz; SSB gives you the choice of 4.0, 3.0, 2.3, 1.2 and 0.5kHz. HF sensitivity is typically less than 1µV.

Tuning

You can manually tune by selecting the band required and turning the largest tuning knob, or you can scan for stations or you can use the keypad to directly enter the station frequency. Pressing the VF/VM key will, alternately, reveal the station (frequency) currently tuned or the station (from memory) currently selected.

Memories

Speaking of the memory, there are 3050 available (yes, 3050!) arranged in 25 pages. The first can accommodate 650 station memories; the other 24, 100 each. So if you have trouble remembering a station, you might have just as much

trouble remembering where you stored that station. A notebook or computer database might help! You can store the stations manually, semi-automatically or what they call ATS, or Auto Tuning Storage. We won't even try to explain the processes involved: you can read that when you buy your Tecsun PL-880.

Clock/Alarm

The radio has a clock, sleep timer, snooze and alarm timer – you can set the alarm to sound anywhere from 1–90 minutes (if you haven't woken after 90 minutes, you probably should replace your hearing aid batteries). The snooze timer is fixed at five minutes. There's also a backlight which can auto turn-off if you wish it to.

Hidden features

While the majority of users will gain all the information they need to drive the Tecsun PL880 from the user manual supplied, there are several "hidden" features that aren't detailed and the advanced user might find useful. Tecsun Radio Australia have detailed these on a separate PDF sheet which they will supply on request. These features include:

Activating synchronous detection (LSB and USB)

Changing the FM de-emphasis (you can change from factory set 50µs to 75µs)

Changing the line output level

Adding a 'seconds' display to the time

Adjust the low-voltage shutdown point

Displaying the software version and build date

Displaying remaining battery life

In use

What else can we say but WOW? It's a good looking radio, it's a great sounding radio and it has every feature you could possibly want (and then some). In fact, in the time we had to play with it, we reckon we just scratched the surface of what it can do. And even then, it was impressive, to say the least.

At \$239.00 (inc GST) it's not a cheap radio. If you want a cheaper model, Tecsun Radio Australia (part of the Av-Comm group) have them from under \$30. But if you want a radio that offers exceptional performance and a great range of "creature comforts", you can't go past this one.

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