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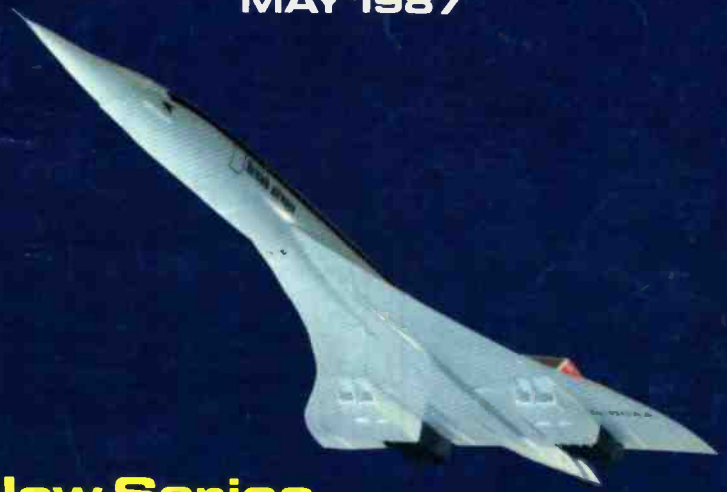

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Panasonic RF-B60 Receiver Reviewed

NEW

For The Radio Listener

PANASONIC RF-B60 RECEIVER

Peter Shore

The Panasonic RF-B60 has recently entered the market in the United Kingdom. It includes features which are becoming common-place on receivers of this size and in this price range, including digital tuning and display, direct-entry tuning and memory system. Peter Shore had the opportunity to test the receiver here in the UK.

The RF-B60 covers v.h.f. f.m. from 87.5 to 108MHz, long wave 155-519kHz, m.w. 522 – 1611kHz and short wave continuously from 1615kHz to 29.999MHz (except for models sold in West Germany which range only to 26.100MHz).

The set has a most sophisticated tuning system which allows one of three possible methods to be employed. A large rotary tuning knob with two faces, one on the front and another on the right hand side of the set, allows for conventional tuning, whilst a calculator type keypad enables frequencies to be input directly. There are 12 keys on the pad, marked from 1 to 9 together with 0, a decimal point and a final key marked M for memory. To input a frequency, it is necessary to depress the small key marked FREQ alongside the main key board, followed by the frequency in either kHz or MHz and then the ENTER key: if the combination is correct, the receiver tunes in the selected channel in less than a second. The digital display shows the numbers as they are keyed in, and displays the final tuned frequency.

Alternatively, individual broadcast metre bands may be selected, using the same keypad – the number 1 key doubles as 120m, through to 13m on the M key. Once again the sequence is the same -press the METER key, followed by the numeric key and then ENTER. The set is then tuned to a frequency towards the lower end of the metre band.

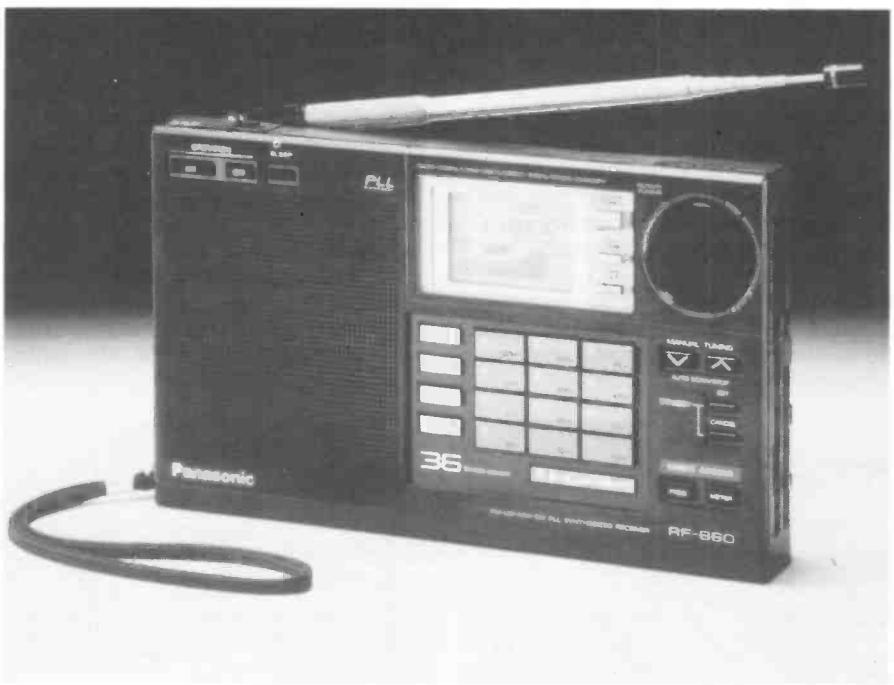
The RF-B60 may also be tuned using two arrow keys adjacent to the keypad. These will tune the receiver in 5kHz steps on shortwave, 9kHz (or 10 for North America) steps on medium wave and long wave, and 100kHz steps on v.h.f. f.m.

These two keys double as controls for scanning. If either arrow key is held down for more than around one second, the receiver will tune automatically along the band, stopping on the first strong signal. Once the upper or lower limit of a broadcast band is reached, the set will start to scan from the other end of the band again. If the scanning mode is used when the set is outside a broadcast band, it will scan until the next broadcast band is found, and then run within that band.

Other features include a dual-time clock, enabling local time and perhaps GMT to be stored; an alarm facility to switch the receiver on at a pre-programmed time and a sleep facility.

A total of thirty-six memory channels are provided, nine on each of medium wave, long wave, f.m. and short wave. Storage of frequencies is straightforward – depress the M key, followed by the numeric key to which one wishes to assign the frequency. To recall a frequency, it is simply necessary to select the appropriate waveband followed by the numeric key. A handy flip-up lid on the top edge of the set conceals a compartment with a station reminder sheet enabling the stored frequencies to be recorded for easy reference.

The large digital display is easy to read and contains a good deal of operating information, including the currently selected band, and the frequency in MHz on v.h.f. f.m. and short wave and in kHz on long wave and medium wave. The display also shows whether the alarm or sleep functions are selected, whilst a colourful lower segment contains a signal-strength meter with a turquoise background and an orange coloured box detailing which number memory, if any, is selected.



The clock is displayed when the set is switched off, or may be shown during operation by depressing the appropriate key. Dual time is recalled by the operation of a further button.

Using the Set

Operation of the Panasonic RF-B60, is, as has been suggested previously, very straightforward, and the designers are to be congratulated for using such intelligent software for the digital tuning and memory features. Audio quality is excellent and is far better than that of the Sony ICF7600D, the Panasonic's closest competitor. A two position tone control – high and low – will alter tonal quality to some extent, by attenuating the higher audio frequencies. I found some of the minor controls a little fiddly in operation, and could prove to be problematic for those with arthritic fingers. Similarly, the absence of a raised "blip" from the 5 key on the key pad makes operation in the dark less easy, and will therefore hinder operation by a visually handicapped listener. There is also no back light for the digital display.

The scan facility is useful, in particular in its ability to operate outside the specified broadcast bands.

There is no variable bandwidth control and the 5.5kHz filter can make listening difficult where two strong signals are broadcasting on adjacent 5kHz channels. No sideband or product detector is provided and the RF-B60 cannot therefore be used for listening to amateur transmissions. Similarly if broadcasters commence testing s.s.b. transmission techniques following the decisions taken at the recent WARC-HFBC, satisfactory reception could be difficult using this radio.

The built-in whip antenna seems to be adequate for day-to-day listening, although there is provision for the connection of a short external antenna. Headphones may be connected to the set, and a 6V d.c. adaptor (optional) may be used instead of the four AA size batteries. Two more AA cells provide memory and clock backup.

A HOLD switch is a useful feature enabling a frequency to be locked, to prevent accidental detuning, and also acts as a main power switch preventing the set from becoming accidentally switched on in luggage when travelling resulting in a set of flat batteries on arrival at your destination!

PANASONIC RF-B60 RECEIVER

PANASONIC UK LIMITED
300-318 Bath Road, Slough, Berks SL1 6JB

Performance

We carried out tests on the RF-B60 by injecting a test signal through the external antenna socket, and measuring the a.f. output through the headphone socket.

Sensitivity

Fair for a set of this type on shortwave, but poor on long wave and medium wave.

The r.f. signal required to produce a S + N/N ratio of 15dB at output. Carrier modulated with 1kHz tone to depth of 30 per cent:

SW + 32dBμV at 1.6MHz
+ 21dBμV at 3MHz
+ 21±14dBμV above 3MHz

Selectivity

The selectivity was very good on short wave for a set of this type.

6dB points at ± 3.1MHz
60dB points at ± 6.35MHz
Attenuation at ± 5kHz = 29dB
Attenuation at ± 10kHz = 71dB

The DX/LOCAL switch attenuates signal at 26dB which is useful for night-time listening on 49 metres in Europe.

The signal strength meter cannot be used for serious measuring for whilst covering a total range of 40dB or so, most of this is taken up by the 30dB interval between readings of 4 and 5!

Image rejection and i.f. rejection are both good for a single conversion receiver with an i.f. of 450kHz.

Battery consumption is fairly heavy and using conventional batteries, the life is around 2-3 hours, whilst alkaline batteries appear to last for more than 12 to 15 hours. If battery voltage falls below a certain level, the set will not operate.

SPECIFICATIONS

Price	£169.95
Frequency Range	FM 87.5 – 108MHz LW 155 – 519kHz MW 522 – 1611kHz SW 1615kHz-29.999MHz. (26.100MHz in FRG)
Power Source	Battery 6V (4 x AA for radio) 3V (2 x AA for memory back-up) Optional 6V d.c. adaptor (RD-9496E)
Power Output	550mW (r.m.s. max)
Dimensions	198 x 118 x 33.5mm
Weight	650g without batteries

Conclusions

The Panasonic RF-B60 is an extremely well built set, with tidy electronics inside. It is well equipped and logically thought out and proves a pleasure to use. It is aimed at the travel market, or at the broadcast listener who wishes to listen to conventional broadcasting on the short wave bands, or it may suit the ardent listener who wishes to supplement his current receivers. It is a direct competitor for the Sony ICF-7600D (2002 in North America) which is comparably priced and has s.s.b. but has only 10 memory channels and has been on the market since late 1983. Lack of s.s.b. could be a drawback for the enthusiastic listener, but is insignificant to count against the set at this time.

With attractive styling and good build quality, and excellent shortwave performance, the Panasonic RF-B60 represents good value for money. □