



Radio Netherlands
Wereldomroep

English

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Sony ICF-2001D / ICF-2010

Sony



Year Introduced/discontinued: 1985/2003

Power: 4.5 Volts DC for the radio (D size, plus 3 penlights to back-up computer and clock). AC Mains adaptor often included in the price

Size: 290 x 160 x 50 mm

Weight: 1800 g

Price: US\$350, CAN\$500

Coverage: FM, LW, MW, SW (150 - 29999 kHz) & 116-136 MHz

Value Rating 

SSB. PLL dual conversion. Excellent follow up to the older ICF2001 released in 1980 (i.e. without the letter "D" at the end of the type number), but completely different. Economical battery consumption. Front end circuitry prone to damage by static on the antenna (e.g. from nearby lightning strikes) causing dramatic loss in sensitivity - be careful if using an outdoor antenna. Two bandwidths with fair/good selectivity and sensitivity. WIDE bandwidth filter perhaps too wide. Unique automatic ECSS "sync" tuning system is very effective. Clock/ Timer. Carefully matched 120 cm telescopic antenna. LED tuning meter. Dial light. Very versatile 32 channel memory and SCAN functions. Keyboard entry or manual tuning knob. Models with a serial number higher than 45000 have a redesigned battery holder to prevent memory batteries working loose, leading to loss of stored frequencies. In the market for longer than most models, the heir apparent is ICF-SW-77.

Radio Netherlands Receiver Test Laboratory

Full Review

This review was compiled independently. Radio Netherlands has no financial connection with Sony, the manufacturer of this receiver.

The following is a text version of an on air review broadcast by Radio Nederland Wereldomroep originally broadcast on January 17th 1985! Yes, that date is correct. This radio is more than 12 years old but is still sold in some shops in the USA. It has disappeared in other markets, but it still offers good value. The radio has been replaced by the Sony ICF-SW-77, although there is no air-band coverage on the SW-77. The set was tested in our own laboratories.

Vital Statistics

The set bears two type numbers. In North America it is known as the ICF2010, in Japan and elsewhere it's called the ICF2001D. That last type-number is confusing, because this new Sony receiver has little resemblance to the ICF2001, i.e. without the letter D after it, introduced in August 1980. The model we tested was marked as the ICF2001D. Put next to the old ICF2001 it's very slightly smaller, measuring 29 by 16 by 5 centimetres, and weighing the same 1.8 kilos including the batteries. That's where the similarity ends, for the new set certainly has a much larger array of push-buttons, 68 in all. At first sight, they might put off someone who's not all that technical at first. There are some familiar points, like a white calculator-style keypad, for directly keying in the frequency. If you wanted to listen to 11730 kHz, you simply punch in 1-1-7-3-0 and then push the "EXECUTE" button. If you can use a calculator, then this set is no problem!

Next to the familiar 11 keys though, are four rows, each of 8 buttons, representing the 32 channels you can store in the memory. These aren't marked 1, 2, 3... 31, 32 as you might expect. It's more like reading a map, for the rows are marked A to D, the columns 1-8. A simple two finger operation stores any chosen frequency in the memory, which you're told in memory b8, or c5, depending on what you've selected.

Good coverage

The ICF2001D has wide coverage. It can be operated continuously between 150 kHz, right up to 29,999 kHz, that includes long wave, medium wave, and shortwave. Plus there is the VHF FM band between 76 and 108 MHz, and, a new trend for its day, the aeronautical band between 116 and 136 MHz. This still makes the radio forbidden fruit in many countries in Asia, where listening to the airband is considered an offence. But all that coverage, in a relatively small box, is impressive.

At this point, let's re-examine those 32 keys for the memories, in the four rows. Under most of the keys, is blue coloured lettering, because like some computer and typewriter keyboards, each key has a double function. If you press and hold a key marked SHIFT, the blue coloured functions become active, and for the most part it means you can get the set to jump immediately to the bottom of the longwave, medium wave, the 120, 90, 75, 60, 49, 41, 31, 25, the 22, 19, 16, 13, 11 metre shortwave bands, plus the FM and airband.

Scanning Functions

You can decide to scan between two chosen frequencies, stopping when a signal is picked up, or start looking through the 32 channel memory. In that case, the 2001D selects each memory with anything stored in it for 5 seconds, lets you hear it, and then moves to the next. If you like

computers, and gadgets, this is a very flexible set. You can also opt for manual tuning, with a conventional recognisable knob. It allows you to move in steps up and down the bands. You move in 50 kHz steps on FM, 25 kilohertz on the airband, and either 1 kHz or 100 Hertz on short, medium and longwave, depending on what you select. Those steps are quite audible, and you may well find that since the minimum step is 100 Hz each time, that using this receiver for radio-teletype (RTTY) reception is difficult. It's less critical when listening to amateur radio operators on either upper or lower sideband, both possible on this set. Ideally we would have liked the tuning steps on between 150-29999 kHz to be 50 or even 25 kHz, though back in 1985 this would probably add to the cost. The set will take account of the fact that the spacing between medium wave stations is 10 kHz in North America, and only 9 kHz in Europe.

This leads to an examination of the ICF2001D's selectivity, or ability to pick out the station you want from the rest of the rabble. The wider the filter, (rather like a window looking out on the shortwave band), the better the audio quality, but the greater the risk other stations using frequencies nearby will also be heard. The ICF2001D offers two settings, wide and narrow. We found the filters used to be fair for a receiver of this type. The "wide" setting is perhaps too wide, for in crowded bands you always seem to suffer from a 5 kHz whistle caused by adjacent stations. The "narrow" setting, around 3 KHz at -6dB, is definitely needed, and still produces very acceptable audio when listening to news programmes.

"Sync" Tuning Facility

There's a new button on this receiver which is a major high-point. It's marked "sync". Push it, and the receiver switches to either upper or lower sideband, but locks on to the station's carrier. It's an automated version of the old shortwave listener technique of switching to single-sideband and tuning very carefully to get rid of the resulting whistle. Why bother? Because the result is a signal less prone to the fading distortion, and it's very handy if there is a strong station on one side of the one you're trying to listen to. Press the "sync" button, and select either the lower or upper sideband, which ever gives clearer reception. The 2001D is rock steady enough for this idea to work well.

We noticed a design fault on the first examples produced in early 1985. The sync circuitry generated its own background noise. On lower frequencies, e.g. medium wave or the 49 metre shortwave band, it's less of a problem. But during our on air review in 1985 we found Radio Bucharest (in those days) on 11940 kHz with an excellent signal when tuned to AM. You could hear a clear "Sssssh" sound when the sync facility was switched on. Some listeners reacted to our review by saying it sounded like a form of jamming. But it was generated by the set itself. Further down on the 60 metre tropical band results were quite good. We were also able to listen to feeder transmissions and easily separate the two programmes being broadcast.

However, we tested another example of the set in August 1985, and found the synthesiser noise had been considerably reduced, enhancing the "sync" facility. On very weak signals, the sync facility fails to lock on to the carrier, but in 9 attempts out of 10, the system works well. The selectivity of the narrow filter was slightly better than on the previous model.

Sensitivity

Another important quality to check for is the set's sensitivity, or its ability to pick up weak stations. The results here are quite good. Our sample was very sensitive on all bands and fortunately Sony introduced an RF gain control. This means that if signals on the 49 metre band in the European evening get too strong causing distortion, you can reduce the signal level getting into the set. In addition there's a rather coarser switch marked DX-LOCAL, which we found was best left on the DX setting. On the old ICF2001 (released in 1980!) you had to adjust an aerial tuning "thumb" wheel for best signal strength. This isn't needed on the ICF2001D. An extra use has also been thought out for the manual tuning knob. You can use it to set in the built-in 24 or 12 hour clock, and the versatile timer. That's clever, the only drawback being that there is no way to control an external tape recorder with the timer.

Signal strength is displayed on a scale of 10 light emitting diodes, which also doubles as a battery indicator. A light illuminates the frequency display for night-time use.

Power Consumption

The old ICF-2001 back in 1980 quickly got a reputation for being very expensive to run on batteries. It took so much current the batteries got warm and lasted about 5 hours. The new ICF-2001D takes three Size D batteries for the radio section, and 3 penlight cells for the computer section of the receiver. We measured current consumption as 150 milliAmps at an average listening level, which is a vast improvement and quite economical. You're still better off using mains electricity if possible, and in many countries the set is (was) supplied with a 4.5 DC mains power supply.

Looking at some of the other features, there's a headphone jack wired for stereo which is handy if you want to use the Walkman style headphones, and a tape-recorder output with a very low level. You have to use the "microphone" input instead of the "line" input on your tape recorder, which seems odd. A three position tone control is available, but the middle setting seems to be sufficient for most types of listening.

Antenna

The set has evidently been carefully matched to the built-in 120 cm telescopic antenna. There is provision for connecting an external shortwave and airband antenna, but we found a number of cases where connecting a 10 metre longwire antenna gave no improvement or even worse reception. The provision of a shoulder strap indicates it's intended as a portable receiver, and a power lock switch prevents the receiver going on accidentally in the luggage. The smaller, cheaper and newer, ICF-SW-7600G is better suited for the traveller though, unless you plan to be in one place for a long time. The ICF2001D has a considerably more audio power than the ICF-SW7600G.

An active antenna, the SONY AN-1, is still advertised as being suitable for the 2001 series. Under normal signal level conditions in Europe we did not find it made any improvement on shortwave signals. On medium wave, the AN-1 was useless, as it is impossible to disconnect the ICF2001D's internal ferrite rod antenna.

Prices

More than a decade ago, in 1985, the recommended retail price of the ICF-2001D in the UK was £366 including VAT, but "normal" shop prices were between 10 and 15% lower than that figure. In North America, the set is (was) called the ICF2010 to distinguish it from so-called "grey market" imports. It was last seen at around 300 US dollars in the shops. This receiver was sold in The Netherlands for around 1500 Guilders, 1195 at Schiphol Amsterdam airport. Overall this set is excellent for the serious shortwave listener. It still represents a good buy.

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